

Analysis of Military Retirees in Utah: Impacts, Demographics and Tax Policy

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Executive Summary:

Military retirees are a unique and growing population in Utah with outsized capabilities and resources. They contribute substantially to Utah’s economy and help fund its state and local governments. Besides highlighting their characteristics and comparing them to other retirees in the state, this study informs the discussion about the economic development merits of a state income tax reduction.

Based on REMI economic modeling, some \$430 million in military pensions in Utah supported 6,223 jobs and \$474 million in economic activity in 2015. This pension income generated \$283 million in additional income to other residents. Including military retirees’ non-pension income, which has a fiscal impact but not an economic impact to the state, military retirees in Utah were responsible for an estimated \$115 million in state and local tax revenue and \$81 million in government expenditures, resulting in a net fiscal impact of \$34 million, about \$2,022 per retiree (see Section 1).

Just over 11 percent of Utah’s veterans are military retirees. Reaching military retiree status generally requires at least 20 years of service in the U.S. armed forces. Most live along the Wasatch Front, although they have a presence in every county. Approaching 17,000 in 2015, the growth in Utah’s military retiree population over 15 years has stayed above the U.S. average, especially for retirees age 65 and above (see Section 2).

Compared to other retirees in Utah, military retirees are younger and more likely to be born out of state, male and married with children at home. Military retirees are well educated, usually own homes, and commonly have a second career. They earn considerably higher incomes than most Utahns but have comparable home values (see Section 3).

Although Utah has been steadily catching up, largely due to its robust general population growth, the state is still home to fewer military retirees than most states (see Section 4). One reason is that, even in proportion to the size of its economy and population, the state’s military presence is not as pronounced as

many states' in terms of military installations, defense spending, active-duty personnel, number of veterans and military pension income (see Section 6). Utah does have large contingents of currently-serving and retired reserve and guard members relative to its population. They tend to have stronger Utah ties than active-duty retirees or service members with assignments in the state.

Many state governments have lowered or removed state income tax assessments on military pensions to honor military retirees and encourage more of them to live in their states (see Section 4). Tax reductions benefit military retirees and represent a loss of income tax revenue to the state as a whole. The greatest potential for offsetting that loss is if more military retirees choose to live in a state in order to enjoy its tax benefits. This assessment raises two questions. Do income tax exemptions increase a state's military retiree population through migration from other states? Are new migration flows enough to replace the lost revenue?

Considerable research explores the extent to which military retirees choose where to live based on tax advantages (see Section 5). Regarding state income tax reforms targeting this group, findings are mixed and generally suggest a weak migration response is possible, but not guaranteed. Tax policy is one of the less important factors known to influence place of residence decisions, and state income tax represents one of several state and local taxes that contribute to the overall tax burden faced

by military retirees in a particular state. A hypothetical full exemption on military pensions in Utah in 2015 would have saved military retirees an estimated \$644 each on average, about 12 percent of their total state and local tax burden.

Studies suggest military retirees evaluate Utah as a retirement destination largely based on family proximity, lifestyle amenities, previous experiences in the state, economic opportunity, the cost of living, the quality of government services and access to military communities and resources. This study provides context for Utah and other states by presenting descriptive data on their economies, defense sectors, military-related populations and other characteristics likely connected to military retiree migration (see Section 6).

Given existing data and methods, assumptions regarding the existence or size of a future migration response from a Utah income tax exemption for military pensions would be speculative, since many financial and non-financial factors besides income tax policy affect where military retirees decide to live. A limited analysis shows new tax revenue from possible growth in Utah's military retiree population may be sufficient to replace lost revenue from the exemption. However, an exemption is more likely to result in a net cost for the State of Utah, even in the long term, when one accounts for government expenditures needed to support the population and economic growth additional military retirees would bring to the state.

Section 1:

Fiscal and Economic Impacts from Military Retiree Income in Utah

This section addresses the contribution of military retirees and survivors to Utah in terms of tax revenue, jobs and economic activity based on 2015 data from the Department of Defense, supplemented by original findings from U.S. Census Bureau data in Section 3 of this document. The analysis incorporates retirees' pension and non-pension income, with emphasis on the economic impacts of pension income. Not included here are economic benefits to Utah from non-pension federal outlays for military retirees in the state, such as health care.

Military retirees were an important part of the state's economy in 2015. They brought \$430.4 million to Utah in pension income alone. They paid an estimated \$32.1 million in state and local taxes from their military pensions, besides tax payments related to their larger non-pension income (see Table 2). Military pension spending supported approximately 6,223 jobs in Utah (see Table 4). It generated \$283.3 million in personal income and \$24.1 million in state and local tax revenue, in addition to the income received and taxes paid directly by military retirees (see Table 5). State and local tax revenue resulting from military retiree spend-

ing from all income sources amounted to \$115.0 million in 2015, 42.5 percent more than the estimated value of government services that benefited military retiree households and supported the economic activity they generated (see Table 6).

The analysis below begins with county-level pension and non-pension income for military retirees and survivors in 2015. Based on their income, we estimate Utah taxes they paid directly. Government expenditures that support this group are subtracted to create a simple measure of net fiscal impact. Next, we model the economic impact of pension income in terms of jobs, income and GDP. We calculate the tax and government spending implications of additional economic activity indirectly generated. Then, we combine pension impacts with taxes paid on non-pension income to show the combined net fiscal impact at the state and local levels. Finally, we discuss the fiscal impact of a state income tax exemption for military pensions and evaluate breakeven scenarios suggesting how much migration an exemption must attract to the state to generate enough new revenue to offset the loss in military pensions taxes.

Table 1: Military Retiree and Survivor Pensions plus Non-Pension Income, 2015 County Totals for Utah

(Thousands of Dollars)

County	Pensions ¹	Non-Pension Income ²	Total
Beaver	\$542	\$1,732	\$2,275
Box Elder	\$6,738	\$14,748	\$21,487
Cache	\$11,201	\$20,460	\$31,662
Carbon	\$1,825	\$4,354	\$6,180
Daggett	\$126	\$328	\$454
Davis	\$114,382	\$207,648	\$322,031
Duchesne	\$913	\$2,481	\$3,395
Emery	\$622	\$1,217	\$1,839
Garfield	\$465	\$843	\$1,308
Grand ²	\$0	\$47	\$47
Iron	\$6,868	\$13,391	\$20,259
Juab	\$702	\$2,388	\$3,089
Kane	\$946	\$1,779	\$2,725
Millard	\$1,289	\$2,481	\$3,770
Morgan	\$3,686	\$5,759	\$9,445

County	Pensions ¹	Non-Pension Income ²	Total
Piute	\$222	\$609	\$831
Rich	\$194	\$375	\$569
Salt Lake	\$97,431	\$189,388	\$286,819
San Juan	\$1,487	\$2,809	\$4,296
Sanpete	\$2,999	\$7,257	\$10,256
Sevier	\$1,995	\$5,103	\$7,098
Summit	\$8,430	\$9,224	\$17,654
Tooele	\$9,356	\$21,771	\$31,127
Uintah	\$1,834	\$4,073	\$5,907
Utah	\$50,861	\$83,808	\$134,669
Wasatch	\$3,090	\$4,027	\$7,117
Washington	\$30,799	\$49,489	\$80,288
Wayne	\$171	\$421	\$592
Weber	\$71,271	\$136,200	\$207,471
Total³	\$430,446	\$794,213	\$1,224,660

Notes:

1. Pension income is the total of military pensions (\$402,691,000) and survivor pensions (\$27,755,000), calculated as actual September 2015 payments times 12.
2. Due to data limitations, non-pension income reported here is for the 16,963 military retirees and does not include survivors. Non-pension income is calculated as the number of military retirees in each county (see Table 9) multiplied by the sum of average non-retirement income and non-pension retirement income per military retiree, both based on Utah estimates from the U.S. Census ACS (see Appendix Table A3). Non-pension retirement income is the difference between total retirement income from the ACS and military retiree pension payments reported by DoD Actuary. While pension income reflects actual disbursements by county, non-pension income is based on statewide averages: There is no disclosure issue for Grand County's one military retiree, who received no pension payment in September 2015.
3. Column totals may not match due to rounding.

Source: For pension income, Department of Defense, Office of the Actuary, 2015 Statistical Report on the Military Retirement System and supporting data received by email in response to an information request; for non-pension income, U.S. Census, American Community Survey (ACS, 5-year) 2010–2014, results of original analysis adjusted to 2015 dollars by the Consumer Price Index for the West region, size B/C cities.

1.1 Military Retiree and Survivor Income

Military pensions for retirees and survivors amounted to \$430.4 million in 2015 (see Table 1). These pension recipients also had other sources of income. An estimated \$794.2 million in military retirees' non-pension income made up 65 percent of total income. Both types of income were distributed among the counties similarly to the military retiree population. Davis County had the most, followed closely by Salt Lake and Weber counties.

Dollar amounts from Table 1 and person counts from Table 9 are the principal inputs to estimate the economic and fiscal impacts that follow. County-level information is valuable because a dollar spent in Utah County, for example, has a different economic impact and sales tax rate than a dollar spent in Cache County, and government expenditures per adult and per school-aged child are not the same in Davis County, for example, as in Washington County.

1.2 Direct Fiscal Impact of Military Retirees and Survivors

The \$430.4 million in aggregate pension income documented above (see Table 1) is consistent with averages of \$23,739 per military retiree and \$12,469 per survivor in 2015. Military retirees' non-pension income from employment and other sources averaged \$46,820 per retiree. Total income was \$1,224.7 million in the aggregate, an average of \$72,196 per military retiree in Utah.

Aggregate and individual tax receipt estimates are shown in Table 2. Military retirees and survivors paid \$31.0 million in income taxes, including \$10.9 million on their pension income. All told, the state received \$66.3 million in income and sales tax revenue from this group, which paid another \$24.6 million in local sales and property taxes.

Taxes paid on pension and non-pension income in Table 2 are estimated based on county-level effective tax rates for the three principal taxes on individuals in Utah: state individual income tax, sales tax and personal property tax. Tax payments are based on effective tax rates for the entire population and

Table 2: Estimated Taxes Paid Directly by Utah Military Retirees and Survivors, Based on Pension and Non-Pension Income, 2015

Tax	Aggregate Taxes Paid (millions)			Taxes Paid per Retiree		
	Pension Income	Non-Pension Income	Total Income	Pension Income	Non-Pension Income	Total Income
State income tax	\$10.9	\$20.1	\$31.0	\$644	\$1,184	\$1,828
State sales taxes	\$12.4	\$22.9	\$35.3	\$732	\$1,350	\$2,082
Local taxes	\$8.7	\$15.9	\$24.6	\$514	\$938	\$1,452
Total	\$32.1	\$58.9	\$91.0	\$1,890	\$3,473	\$5,363

Note: Taxes paid on non-pension income are from military retirees only, while tax estimates for pension income include survivor pensions. In the “taxes paid per retiree” columns, survivor pensions and associated taxes are attributed to living military retirees in order to simplify the analysis.

Source: U.S. Bureau of Economic Analysis, Utah State Tax Commission and Utah State Auditor; fiscal impact analysis by the Kem C. Gardner Policy Institute.

Table 3: Direct Net Fiscal Impact of Military Retiree and Survivor Pension and Non-Pension Income in Utah, 2015

Government	Statewide Amounts (millions)			Amounts per Retiree		
	Taxes Paid	Govt. Expenditures	Net Impact	Taxes Paid	Govt. Expenditures	Net Impact
State	\$66.3	\$56.2	\$10.1	\$3,911	\$3,315	\$596
Local	\$24.6	\$15.9	\$8.7	\$1,452	\$936	\$515
Total	\$91.0	\$72.1	\$18.8	\$5,363	\$4,252	\$1,111

Note: Taxes paid amounts in this table match Table 2 totals. In the “taxes paid per retiree” columns, survivor pensions and associated taxes are attributed to living military retirees in order to simplify the analysis. See Table 6 for a more comprehensive measure of the fiscal impact of military retirees and survivors that incorporates economic impacts. Some column totals and net direct fiscal impact differences do not match due to rounding.

Source: Fiscal impact analysis by the Kem C. Gardner Policy Institute.

do not reflect income tax reductions for which some survivors and military retirees may qualify on the basis of age, income or other characteristics.

Like all Utah households, military retiree and survivor households rely on many government services, including roads, fire departments and schools. We are able to estimate most state and local spending based on average prorated per-person expenditures for education and non-education services. Non-education expenditures are based on the total number of military retirees and survivors in each county. Public education amounts per person are multiplied by county-level estimates of school-aged children in military retiree and survivor households. We do not include higher education spending, based on the assumption that college students are not dependents. We do not have data on city and town expenditures or revenue. See the Appendix for more details on fiscal impact methods.

Table 3 presents the net direct fiscal impact, which equals \$91.0 million in aggregate major state and local taxes paid by military retirees and survivors *minus* prorated government expenditures at the state and local levels estimated at \$72.1 million per year. Overall, these residents contribute an estimated \$18.8 million to support governments in Utah each year, approximately \$1,111 per military retiree, based on 2015 data. The results suggest military retirees paid 26 percent more in state and local taxes than their prorated share of the cost of services their households received from state and local governments.

Since military and survivor pension money comes into Utah from outside the state, these dollars have a measurable economic impact, directly and indirectly supporting economic activity. In contrast, incomes earned from sources within the state make up an important part of the state’s economy, but they do not have a distinct economic impact. For this reason, the next section focuses on the economic and fiscal impacts of pensions received by military retirees and survivors. The analysis employs robust economic modeling software: Regional Economic Models, Inc.’s Policy Insight (REMI PI+) (see methodology notes in the Appendix for an explanation of economic impact methods).

1.3 Direct and Indirect Economic and Fiscal Impacts of Military Retiree and Survivor Pensions

As shown in Table 4, military and survivor pensions alone generated 6,223 full- and part-time jobs and supported \$473.7 million in economic activity during 2015. Spending from pensions also generated \$283.3 million in additional income, for a total income effect of \$713.8 million, which includes the original amount of \$430.4 million in pensions. On the individual level, each Utah military retiree created an average of \$16,702 in new income during 2015 for others working in Utah, in addition to the original \$25,376 received per retiree in military pensions, adding up to \$42,078 in annual income impacts per military retiree.

Table 4: Economic Impact of Military Retiree and Survivor Pensions in Utah, 2015

(Statewide dollar amounts in millions)

Impact	Statewide	Per Retiree
Jobs	6,223	0.37
GDP	\$473.7	\$27,925
Personal income	\$713.8	\$42,078

Source: Economic impact analysis by the Kem C. Gardner Policy Institute using the REMI PI+ model.

Table 5: Tax Revenues Generated Directly and Indirectly from Military Retiree and Survivor Pensions in Utah, 2015

(Statewide dollar amounts in millions)

Tax	Statewide	Per Retiree
State income tax	\$19.1	\$1,125
State sales taxes	\$20.6	\$1,214
Local taxes	\$16.5	\$970
Total	\$56.1	\$3,309

Note: The results in this table incorporate the taxes paid on military retiree and survivor pensions, as well as tax revenue generated indirectly through economic activity supported by the spending of those pensions.

The new economic activity generated by pension income coming into the state has its own fiscal impact. Table 5 results include the \$32.1 million in taxes paid directly by military retirees and survivors on their pensions (see Table 2). Table 5 suggests an additional \$24.1 million in tax revenue accrues to state and local governments. This table does not include offsetting government expenditures that inform a more complete presentation of this fiscal impact situation (see Table 6).

1.4 Combined Direct and Indirect Fiscal Impacts of Military Retiree and Survivor Pension and Non-Pension Income

Finally, Table 6 presents our most comprehensive fiscal impact results. It incorporates taxes paid directly by military retirees and survivors on both pension and non-pension income, and tax revenue generated by the economic impact of pension spending. The results include government expenditures for military

retirees and survivors, as well as for the population increment attracted to the state to fill jobs created by pension spending. Military retirees were responsible for an estimated \$115.0 million in tax revenue to state and local governments in 2015. They also consumed or created the need for \$80.7 million in government services, leaving a net fiscal contribution of \$34.3 million. On a per-person basis, the net impact on government finances of each military retiree in 2015 was \$2,022, divided among the state of Utah and local governments, as shown in the far right column below. Military retiree incomes generated 42.5 percent more in state and local taxes than the cost of state and local governments to support both military retiree households and economic activity related to their presence in Utah.

1.5 Fiscal Impact of a Military Pension Exemption

The forgoing analysis can support basic conjectures regarding the fiscal impact of a full or partial exemption of military retiree pensions from Utah's income tax. State income tax policies are discussed in further detail in Section 4 and Section 5.

A \$10.9 million loss in taxes paid directly by military retirees would reduce state individual income tax revenues from \$82.7 million to \$71.7 million for this group (see Table 6). A partial exemption would reduce state income tax revenues by some percentage of \$10.9 million. With a full exemption, the net fiscal impact would remain positive at \$23.4 million. However, only a small fraction of the \$10.9 million loss in state revenue would likely be recouped by the state through taxation of income generated from economic impacts when individuals spend the money instead of the state.

The greatest potential for offsetting state income tax losses from an exemption is if more military retirees migrate to Utah in order to enjoy the tax benefit. However, any attempt to quantify a possible migration response for Utah, given existing data and methods, would be fairly speculative, since many financial and non-financial factors besides income tax policy affect where military retirees choose to live. See Section 5 for an in-depth treatment of how state income tax policy and other factors may affect where military retirees choose to live.

Table 6: Direct and Indirect Net Fiscal Impact of Military Retirees and Survivors in Utah, Including Pension and Non-Pension Income in 2015

Government	Statewide Amounts (millions)			Amounts per Retiree		
	Taxes Paid	Govt. Expenditures	Net Impact	Taxes Paid	Govt. Expenditures	Net Impact
State	\$82.7	\$63.3	\$19.4	\$4,874	\$3,729	\$1,144
Local	\$32.4	\$17.5	\$14.9	\$1,908	\$1,030	\$878
Total	\$115.0	\$80.7	\$34.3	\$6,782	\$4,760	\$2,022

Note: These fairly comprehensive fiscal impact results incorporate the direct and indirect fiscal impacts from military and survivor pensions, as well as the taxes paid directly on non-pension income, which does not have an indirect economic impact in the same sense as pensions from out of state. Some column totals and net direct fiscal impact differences do not match due to rounding.

Source: Fiscal impact analysis by the Kem C. Gardner Policy Institute.

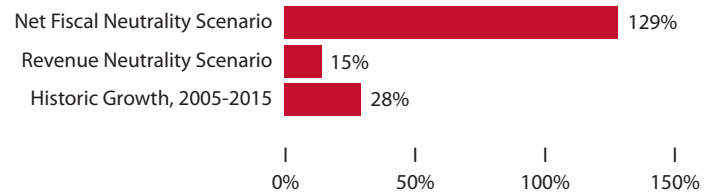
At \$10.9 million for 2015, the analysis presented in Table 2 suggests a much smaller loss in income tax revenue than that given by the January 2016 fiscal note to H.B. 99 from Utah's 2016 General Session. The fiscal note estimates a \$17.0 million loss in revenue to the state's General Fund, Education Fund and/or Uniform School Fund in FY 2017. State income taxes paid per retiree are \$1,020 in the fiscal note, compared to only \$644 in Table 2. The large difference is likely due primarily to different tax rate assumptions. A smaller factor is that the results correspond to different years, 2015 and 2017, and some inflation and growth would occur in the intervening two years.

Tax revenues in the fiscal note may be based on 2014 military pension income of \$387.8 million, or \$414.9 million including survivor income, likely adjusted for inflation for use in FY 2017 impact calculations.¹ The fiscal note's implied state income tax rate would be somewhere between 3.9 percent and 4.5 percent. That range is considerably higher than 2.5 percent of personal income, the effective tax rate estimated in this analysis, or 2.8 percent, Utah's effective state income tax rate in Appendix Table A5.

1.6 Breakeven Migration Scenarios for Military Pension Exemption

To be fiscally neutral at the state level, a full state income tax exemption for military pensions would need to cause at least a 129 percent increase in Utah's population of military retirees (see Figure 1). For the State of Utah to merely achieve revenue

Figure 1: Estimates of Military Retiree Population Change Needed for a State Income Tax Exemption for Military Pensions to be Revenue Neutral and Fiscally Neutral at the State Level



Note: Results for the two scenarios (129 percent and 15 percent) are changes in the number of military retirees above the 16,963 living in Utah in 2015, an additional 21,857 military retirees and 2,584 military retirees, respectively (see Table 7 and Table 8). The historic growth rate is based on the increase in Utah from 13,246 military retirees in 2005 to 16,963 in 2015 (see Appendix Table A1). The 28 percent result is provided as a benchmark for possible future growth over a ten-year time period. The growth in the military retiree population needed to satisfy the scenarios for fiscal neutrality and revenue neutrality must be in addition to whatever future growth in the population segment occurs over ten years (or another more relevant time frame) due to causes besides a military pension exemption in Utah.

Source: Fiscal impact analysis by the Kem C. Gardner Policy Institute; U.S. Department of Defense, Statistical Report on the Military Retirement System.

neutrality, not considering government expenditures from related population and economic growth, the migration response from an exemption must produce an increase in the number of military retirees of 15 percent or more.

As a reference point, the ten-year increase in the number of military retirees in Utah from 2005 to 2015 was 28 percent, an

Table 7: Utah Military Retiree Population Needed to Achieve Net Fiscal Neutrality with a Full State Income Tax Exemption on Military Pensions

Level of Government	Net Fiscal Impact per Military Retiree	Military Retiree Population Needed	Increase over 2015 Population	Percent Increase
State	\$500	38,820	21,857	129%
State & local	\$1,378	24,895	7,932	47%

Note: These population estimates indicate how many military retirees would be needed in Utah to offset a \$10.9 million loss in state income tax revenue. The analysis takes into account government revenues and expenditures (net fiscal impacts) associated with military retiree households in 2015 (see Table 6). Survivor pension amounts are assumed to maintain their existing proportions to current military retiree counts and pensions for any military retiree households migrating to Utah in response to a tax exemption. Population changes are compared to the baseline of 16,963 military retirees in 2015.

Source: Fiscal impact analysis by the Kem C. Gardner Policy Institute.

Table 8: Utah Military Retiree Population Needed to Achieve Revenue Neutrality with a Full State Income Tax Exemption on Military Pensions

Tax Revenue Included	Revenue per Military Retiree	Military Retiree Population Needed	Increase over 2015 Population	Percent Increase
State income tax	\$1,665	23,526	6,563	39%
Total state taxes	\$4,229	19,547	2,584	15%
State & local taxes	\$6,137	18,743	1,780	10%

Note: These population estimates indicate how many military retirees would be needed in Utah to offset a \$10.9 million loss in state income tax revenue. The analysis takes into account government tax revenues generated directly and indirectly from military and survivor pensions and military retiree non-pension income in 2015. Survivor pension amounts are assumed to maintain their existing proportions to current military retiree counts and pensions for any military retiree households migrating to Utah in response to a tax exemption. Population changes are compared to the baseline of 16,963 military retirees in 2015.

Source: Fiscal impact analysis by the Kem C. Gardner Policy Institute.

average of 2.5 percent annual growth (also see Figure 3 and Appendix Table A1). The 129 percent and 15 percent increases given in Figure 1 could occur over a longer time period than ten years, but they must come in addition to ongoing growth from other causes.

Normal growth in the military retiree population above its 2015 level for reasons other than an exemption will increase the breakeven population levels needed for revenue and net fiscal neutrality above the results presented in Figure 1. Breakeven amounts would also be much higher if the actual revenue loss from a military exemption were closer to the \$17.0 million suggested by H.B. 99's fiscal note, rather than the \$10.9 million estimated in this report. Thus, our scenario results may understate the amount of migration required to keep state and local governments fiscally neutral.²

This section does not propose a timeframe for these significant population increases to occur, nor does it find evidence to establish whether they are likely to occur. Section 5 reviews research related to the effect of state income tax policy on where military retirees choose to live. Besides discussing the source of Figure 1 results, the remainder of this section presents three other scenarios that include local government revenues and expenditures or focus on state income tax revenue only.

Fiscally neutral exemption scenarios:

With a full state income tax exemption on military pensions, military retirees would each generate an estimated \$500 in state revenues (see Table 7), compared to the \$1,144 each currently brings the state in income and other state taxes without an exemption (see Table 6). Both figures are net of state and local government expenditures for military retiree households. To maintain fiscal neutrality while offering a military pension exemption worth an estimated \$10.9 million, the State of Utah would need to see an increase of 21,857 military retirees, 129 percent more than the number living in Utah in 2015 (see Table 7). That extraordinary growth must come from persistent migration flows of people motivated by the tax exemption, apart from other trends affecting Utah's military retiree population.

Adding in local tax revenues and expenditures, based on a net fiscal impact of \$1,378 per person (versus \$2,022 without an exemption, as in Table 6), the state would need 47 percent more military retirees than lived in Utah in 2015 for a fiscally neutral military pension exemption—7,932 additional military retirees.

Revenue neutral exemption scenarios:

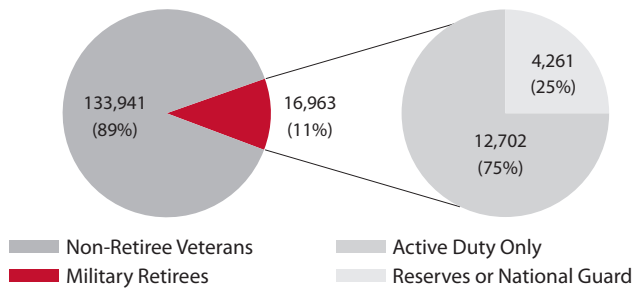
Merely achieving revenue neutrality is not as difficult as reaching net fiscal neutrality. Analysis for the narrower revenue measure ignores additional government expenditures needed to accommodate military retirees that migrate to Utah because of a military pension exemption on state income taxes. With a full state income tax exemption on military pensions, military retirees would each generate an estimated \$4,229 in state revenues (see Table 8), compared to the \$4,874 paid without an exemption (see Table 6).

To generate enough new revenue to offset a \$10.9 million loss in state income tax revenue, the State of Utah would need an independent increase of 2,584 military retirees, 15 percent more than the number living in Utah in 2015 (see Table 8). That requirement falls between the 39 percent increase needed for a neutral exemption in terms of the state income tax revenue alone, and the 10 percent increase needed when revenue from state and local taxes are included.

A 15 percent increase matches the most aggressive migration response considered in a study of South Carolina's military pension exemption (Carey & Mikota, 2016) and exceeds all scenarios considered in a study of a proposed exemption in New Mexico (Popp & Starbuck, 2009). Like the scenarios in Table 8, those studies only addressed revenue neutrality, without estimating government expenditures required to support population growth. The literature to date on tax policy and retiree migration does not support specific predictions of migration responses to tax exemptions. A multitude of factors affect where military retirees choose to live (see Section 5).

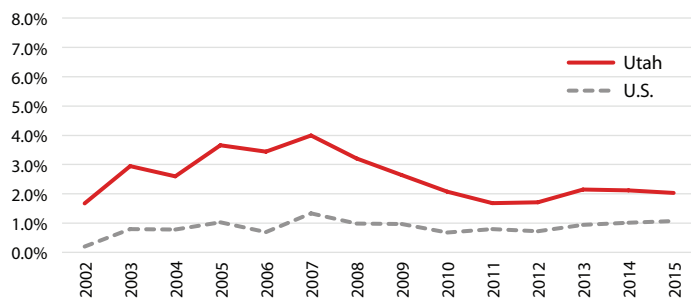
Breakeven estimates in this section are based on recent historic averages for earnings, tax revenues and government expenditures. Newly-arriving military retirees' income may not be similar to population averages in terms of their incomes, tax payments and use of government services. For example, military retirees who move in response to a military pension exemption may be younger than established military retiree residents who have lived in Utah for many years. Also, fiscal impact variables will change in the future. Finally, any migration impacts from a tax exemption would take many years to accumulate to create a new equilibrium military retiree population level in Utah.

Figure 2: Veterans, Military Retirees and Reserves Retirees in Utah, 2015



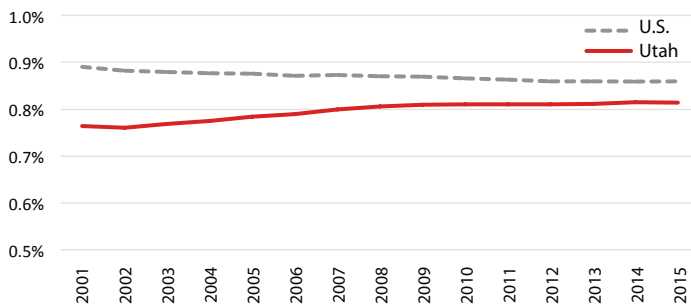
Source: U.S. Department of Veterans Affairs, National Center for Veterans Analysis and Statistics; U.S. Department of Defense, Statistical Report on the Military Retirement System; and U.S. Census Bureau, American Community Survey.

Figure 3: Growth Rates of U.S. and Utah Military Retiree Populations, 2002-2015



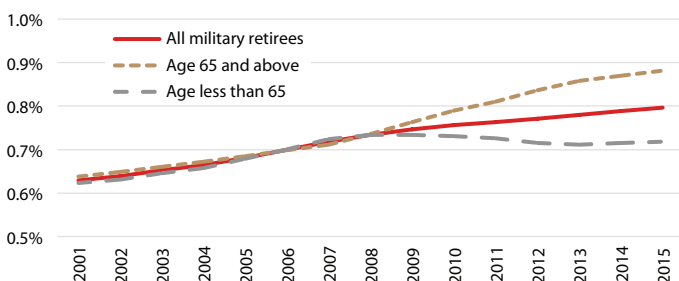
Source: U.S. Department of Defense, Office of the Actuary, Statistical Report on the Military Retirement System.

Figure 4: Military Retirees as a Percentage of the Adult Population in Utah and the U.S., 2001-2015



Source: U.S. Department of Defense, Office of the Actuary, Statistical Report on the Military Retirement System; U.S. Census Bureau, Population Estimates and Intercensal Estimates of residents as of July 1.

Figure 5: Utah's Share of U.S. Military Retirees by age, 2001-2015



Source: U.S. Department of Defense, Office of the Actuary, Statistical Report on the Military Retirement System.

Section 2

Utah's Military Retiree Population

This section describes the current composition of Utah's military retiree population and reviews trends in their number since 2001. It concludes with a map and table showing military retiree and survivor populations by county in Utah.

2.1 Composition

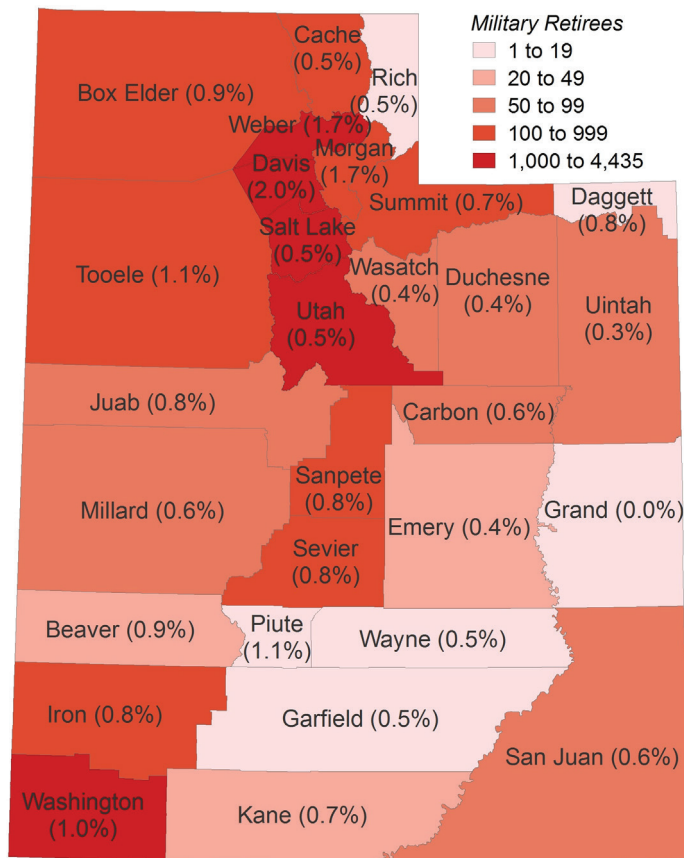
Military retirees are individuals who served in the U.S. armed forces for at least 20 years of active duty or gave equivalent service in Reserve or National Guard units (DoD Actuary, 2015).³ In 2015, 11 percent of veterans in Utah received U.S. military retirement payments.⁴ That year, 16,963 military retirees lived in the state (see Appendix Table A1). Nationwide, 20 percent of military retirees served in the Reserves or National Guard instead of retiring directly from active duty. Based on analysis of a U.S. Census Bureau sample of about 700 military retirees in Utah, the reserve or guard component is relatively larger in Utah than in other states, making up one-fourth of all military retirees (see Figure 2). One in 10 military retirees in Utah has a service-connected disability rating.

2.2 Historical Trends

Since 2001, when there were only 11,900 military retirees in Utah, the annual growth rate for this population has varied considerably, from 1.7 percent to 4.0 percent per year (see Figure 3). Yet growth has always been positive and higher than the corresponding U.S. growth rate. The increase in the number of military retirees in Utah fell below 2 percent during 2011 and 2012 before rebounding somewhat the following three years. Variations in Utah's military retiree population growth can be attributed to three shifting factors with their own fluid causes: the number of new retirements from the armed forces, the number of deaths among military retirees and migration patterns between states.

For over a decade, the number of military retirees in Utah has grown faster than the state's adult population, but Utah still has a somewhat smaller proportion of military retirees than most other states (see Figure 4). While 0.84 percent of the U.S. adult population lived in Utah in 2015, only 0.80 percent of the country's military retirees lived in the state. Military retirees as a share of the state's adult population rose from 0.76 percent in 2001 to 0.81 percent in 2015. That year, 1 in 123 adults in Utah was a military retiree. In contrast, the U.S. has experienced a small, steady decline since 2001, when 0.89 percent of adults were military retirees. While Utah's growth is above average, the state has not caught up to the national average of 0.86 percent in 2015, one military retiree per 116 adults.

Figure 6: Military Retirees by County in Utah, 2015



Note: To calculate military retiree percentages, the number of adults by county is estimated from the total population by county in 2015 and the share of the adults by county in 2010–2014, the most recent U.S. Census data available.

Source: U.S. Department of Defense, Office of the Actuary; U.S. Census Bureau, American Community Survey.

Military retirees have increasingly chosen to live in Utah over other states, a trend driven by growth in the age category of 65 and above (see Figure 5). Utah’s share of U.S. military retirees rose steadily from 2001 to 2015. The number of military retirees in Utah grew by 2.6 percent per year during that period, compared with 0.9 percent average annual growth for the U.S. Since 2008, Utah’s share of all military retirees age 65 or above in the U.S. has seen a remarkable increase, while the share of Utah military retirees under age 65 has decreased slightly. The number of retirees in the younger category eased downward from a peak of 8,341 in 2009 to 7,966 in 2015, declining slightly faster than the downward trend nationwide for the younger age category. The number of military retirees age 65 or above in Utah rose from 6,754 in 2009 to 8,997 in 2015 (see Appendix Table A1).

2.3 County Distribution

As of 2015, every county in Utah had at least one military retiree (see Figure 6 and Table 9). Davis County was home to the largest number, followed closely by Salt Lake County and Weber County.

Table 9: Military Retirees and Survivors by County in Utah in 2015

County	Military Retirees	Survivors	Total
Beaver	37	4	41
Box Elder	315	51	366
Cache	437	62	499
Carbon	93	9	102
Daggett	7	0	7
Davis	4,435	400	4,835
Duchesne	53	6	59
Emery	26	2	28
Garfield	18	0	18
Grand	1	0	1
Iron	286	19	305
Juab	51	7	58
Kane	38	7	45
Millard	53	9	62
Morgan	123	10	133
Piute	13	1	14
Rich	8	1	9
Salt Lake	4,045	698	4,743
San Juan	60	4	64
Sanpete	155	22	177
Sevier	109	18	127
Summit	197	15	212
Tooele	465	34	499
Uintah	87	16	103
Utah	1,790	305	2,095
Wasatch	86	10	96
Washington	1,057	193	1,250
Wayne	9	1	10
Weber	2,909	322	3,231
Total	16,963	2,226	19,189

Source: Department of Defense, Office of the Actuary, 2015 Statistical Report on the Military Retirement System and supporting data received by email in response to an information request.

In most counties, less than 1 percent of the adult population were military retirees. The exceptions with high shares of these retirees were Davis, Weber and Morgan counties, all near Hill Air Force Base. At 0.5 percent, Salt Lake and Utah counties were somewhat below what one would expect based on their shares of the state’s adult population.

A total of 2,226 survivors throughout the state received pension benefits after the passing of a military retiree (see Table 9). The largest concentration was in Salt Lake County.

Considering there are an estimated 2.48 individuals per household (see Table 10), and a few households have more than one military retiree, the total number of people of all ages in military retiree households in Utah is estimated at 41,460 for 2015. Household information is not available for survivors. If they are similar to retirees in terms of household size and the share of multiple-survivor households, the total population living in military retiree and survivor households in Utah exceeded 45,000 that year.

Section 3

Profile of Military Retirees in Utah

This section briefly introduces the data used and analysis performed to learn more about military retirees in Utah. A demographic profile for this group is followed by a description of their financial characteristics.

Compared to other retirees in Utah, military retirees are younger and more likely to be born out of state, male and married with children at home. Military retirees are well-educated, usually own homes and commonly have a second career. They earn considerably higher incomes than most Utahns, but have comparable home values.

3.1 Data and Methods

From 2010 to 2014, the American Community Survey (ACS) conducted by the U.S. Census Bureau received responses for 131,935 individuals living in 53,804 households in Utah.⁵ Seven percent of these, 9,874 individuals, were receiving retirement income, and 717 retirees participating in the survey were likely military retirees.⁶

Careful analysis of the sample allows us to infer many characteristics of military retirees in Utah. We are also able to compare military retiree individuals and households to other retirees and to the adult population.

Military retirees are men and women who qualified for a pension by serving in the armed forces. Some military retirees supplemented their active-duty service with participation in reserve or National Guard units. The Air Force, Army, Navy, Marine Corps and Coast Guard have reserve components. The Air Force and Army also have National Guard forces in each state. As shorthand for military retirees with reserve or Guard experience, Section 3 uses the term “reserve retirees.”

Service members can retire from active duty at any age with at least 20 years of service. People who fulfill retirement requirements partially or entirely in reserve or guard units receive a pension only after age 59. Nationwide, 80 percent of military retirees completed their service in active-duty units, while 20 percent are reserve retirees. In Utah, reserves make up a larger share of current and former military service members living in the state, perhaps 30 percent or more, although exact Utah counts are not available.

To remain anchored to the known U.S. proportion without ignoring the Utah reality that is less well-documented, we assume a 75-25 split for this analysis: that three out of four military retirees retired from active duty after 20 years of service at age 38 or later, and that one out of four is a reserve retiree age 60 or above with at least 11 years of active duty. ACS respondents in either group must be receiving retirement income to be counted as likely mil-

itary retirees for this analysis. Years of service are estimated from survey data based on the periods in which likely retirees served.

All comparisons presented in the text below between military retirees and non-military retirees are statistically significant for the Utah population. We also gain some insights into two sub-groups of military retirees: active duty and reserves. Appendix Table A3 provides complete results.

3.2 Demographic Profile

A summary of demographic results is given in Table 10. The reader can compare military retirees to other retirees and the entire adult population in Utah over age 18. The results address their age, sex, race and ethnicity, place of birth, marital status and household size.

Age: As a group, military retirees in Utah are significantly younger than non-military retirees in the state. About 40 percent of all military retirees are under 65 years old, compared to 30 percent for other retirees (see Figure 7). The median age for military retirees is 67 years, compared to 69 years for non-mili-

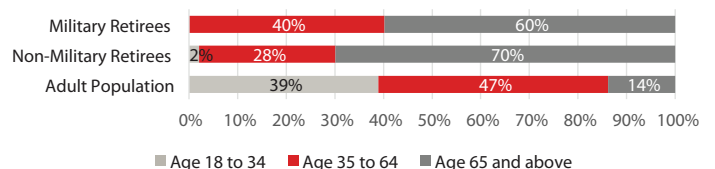
Table 10: Demographics of Census-Derived Military Retirees, Other Retirees and All Adults in Utah, 2010–2014

Item	Military Retirees	Non-Military Retirees	Adult Population
Population	15,984	148,771	1,969,126
Sample size	717	9,157	98,403
Age, median	67	69	40
Male	97%	52%	50%
Hispanic or non-white	6%	5%	12%
Utah birthplace	20%	33%	32%
Married	79%	63%	60%
Any children under 18	17%	11%	43%
Household size	2.48	2.25	3.03

See **Appendix Table A3** for table notes and more demographic measures.

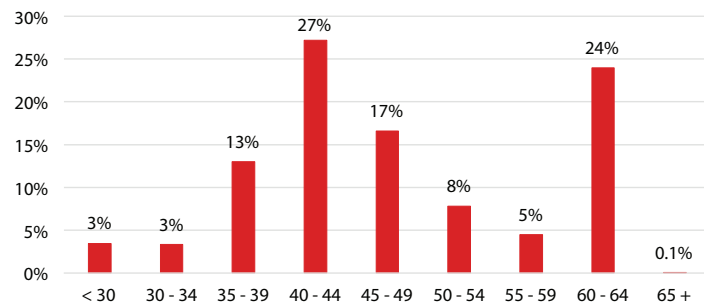
Source: U.S. Census Bureau, American Community Survey.

Figure 7: Age of Military Retirees Compared to Other Retirees and the General Population, Utah 2010-2014



Source: U.S. Census Bureau, American Community Survey, original analysis (see Appendix Table A3).

Figure 8: Military Retiree Age at Retirement, U.S. FY2015



Source: U.S. Department of Defense, Office of the Actuary, Statistical Report on the Military Retirement System.

tary retirees (see Table 10). Among military retirees, those with active-duty backgrounds are much younger than those retiring from reserve and guard units, with median ages of 65 and 77 years, respectively.

Nationwide, military retirees’ average age at retirement was 47 years in 2015. Fully half (51 percent) retired by age 45, and well over two-thirds (72 percent) had retired by age 55 (see Figure 8). Nearly one-fourth (23 percent) retired precisely at age 60, and less than 1 percent retired after that age. Over 6 percent retired before age 37, which is the soonest a person could complete 20 years of service. Exceptionally young retirees may have service-connected disability ratings. Others may have accepted early retirement offers related to military downsizing or restructuring. Data on age at retirement is not available for Utah military retirees alone.

Sex: Military retirees in Utah are overwhelmingly male. Just under 3 percent are female, in contrast to 48 percent for non-military retirees in Utah and very close to 50 percent for the general adult population.

Race and ethnicity: Military retirees are predominantly white and non-Hispanic like other retirees. Both groups are less diverse than the Utah population as a whole in terms of race and ethnicity. Among military retirees almost 6 percent are Hispanic or non-white, compared with 12 percent for the general population of adults.

Place of birth: One in five military retirees was born in Utah—only one in six among the active duty subgroup—whereas fully one-third of non-military retirees were born in-state. Almost two thirds of the military retirees in Utah are from states outside the continental West.

Marital status: Utah’s military retirees are much more likely to be married than other retirees, 79 percent versus 63 percent, respectively. About 60 percent of all adults in Utah are married.

Household size: Military retirees in Utah have more people living with them than do non-military retirees, 2.48 per household versus 2.25. Most of the difference in household size can be attributed to the number of children under age 18 and adults un-

Table 11: Financial Characteristics of Census-Derived Military Retirees, Other Retirees and All Adults in Utah, 2010–2014

Item	Military Retirees	Non-Military Retirees	Adult Population
Post-high school education	85%	68%	66%
Graduate/professional degree	23%	14%	8%
Employed	38%	19%	65%
In poverty	2%	4%	13%
Home owners	91%	88%	70%
Home value, median	\$211,401	\$207,077	\$211,401
Median household income	\$79,860	\$59,896	\$60,148
Median income per adult	\$56,377	\$34,710	\$22,602

See Appendix Table A3 for table notes and more financial characteristics.

Source: U.S. Census Bureau, American Community Survey.

der age 30. For example, 17 percent of military retirees in Utah have at least one child at home, compared to 11 percent for other retirees.

3.3 Financial Profile

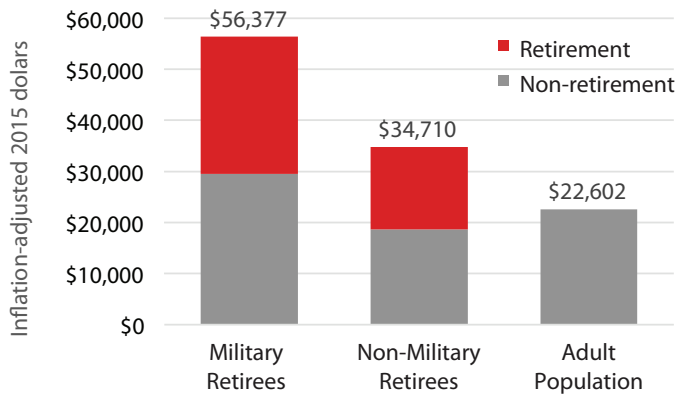
The distinct financial characteristics of Utah military retirees reflect their contributions to the state’s economy. Table 11 compares their earnings and homes, education and employment to those of other retirees and the general adult population.

Education: Military retirees in Utah completed more formal education than their peers. Fully 85 percent of Utah’s military retirees had received post-high school education, compared with two-thirds of other retirees and non-retirees. Furthermore, 23 percent of military retirees had earned advanced graduate or professional degrees, compared with 14 percent of non-military retirees and 8 percent of the general population of adults.

Employment: Military retirees in Utah are twice as likely as other retirees to have a job, 38 percent versus 19 percent, respectively. The most common type of employer of military retirees is a for-profit company. Compared with non-military retirees, a larger share of military retirees works for local, state or federal governments, which hire 41 percent of employed military retirees in the state and 35 percent of employed non-military retirees. Military retirees were slightly more likely than the other groups to be self-employed and less likely to work for a non-profit organization.

Poverty: Consistent with their favorable employment and income situations, only 2 percent of military retirees in Utah have income below the official poverty line for their household type, whereas 4 percent of other retirees in the state are considered poor. The median ratio of personal income to poverty-line income is 501 percent for military retirees, versus 389 percent for non-military retirees and 305 percent for all adults.

Figure 9: Median Income per Adult for Military Retirees, Other Retirees and All Adults, Utah 2010-2014



Note: Median retirement and non-retirement income amounts for military retirees, non-military retirees and the adult population from Appendix Table A3 were adjusted upward by 17.6 percent, 12.9 percent and 9.9 percent, respectively, in order to display amounts for the two income components that add to median total income for each group.

Source: U.S. Census Bureau, American Community Survey.

Home ownership: Over 90 percent of military retiree households occupy homes they own, which is almost four percentage points higher than the home ownership rate for other retirees. Of all households in Utah, 70 percent occupy residences they own instead of renting.

Home values: The median home value is \$211,401 for Utah's military retiree households, similar to those of other retiree and

non-retiree households. Any differences in home values are within the sample's margin of error and therefore not statistically significant.

Income: Military retirees receive much more retirement and non-retirement income than other retirees in Utah. At \$56,377, the median annual income per adult for military retirees was a remarkable 62 percent higher than the median for non-military retirees during the five-year survey period (see Figure 9). Both groups had more income than the average adult in the state. The difference in household income between retiree groups was somewhat smaller, 33 percent apart at the median. Mean (average) income differences were likewise pronounced (see Appendix Table A3).

Median retirement income from military pensions and other sources amounted to \$22,827 for military retirees, which is 60 percent higher than that of their retired peers without military pensions (see Appendix Table A3). As noted previously, Utah's young military retirees are likely to choose formal employment after their first careers. At \$31,379 for active duty retirees, median non-retirement income exceeds their retirement income and far surpasses median non-retirement earnings of reserve retirees and non-military retirees.

Government programs: Military retirees in Utah are less likely than other retirees to participate in government programs, including Supplemental Security Income (SSI), Medicare, Medicaid and other assistance for low-income individuals.

Section 4

Military Retirees and State Tax Policy

This section first looks at state income tax treatment of military pensions for Utah and the other 49 states. Next, recent changes in income tax provisions for military pensions are highlighted. Finally, the scope is broadened to consider all state and local taxes. This section leads to the ensuing discussion of the effect of tax policy on military retiree residence choices and migration between states.

More than four out of five states offer a partial or full income tax exemption for military pensions. From 1995 through 2015, five states created or expanded their exemptions, and one state curtailed its exemption. While Utah provides a partial state income tax credit for all pensions, including military pensions, no additional credit applies to military pensions.

State income tax provisions for military pensions can be viewed in the context of state income tax rates on military retirees' non-pension income, as well as their overall tax burdens from the full range of state and local taxes. The effective tax rate for Utah's state income tax is 2.8 percent, somewhat higher than the U.S. average. Perhaps a more salient finding is that the to-

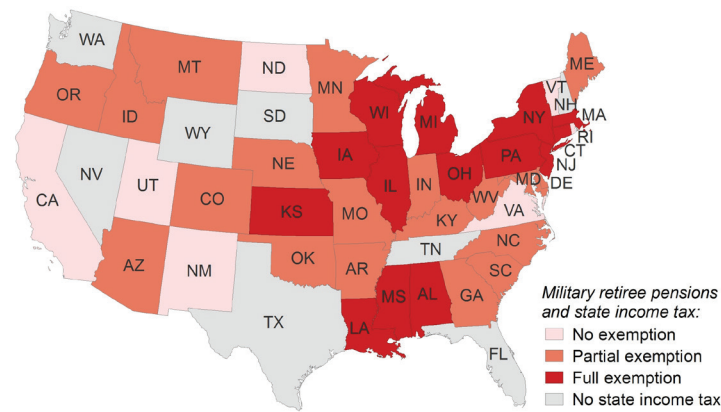
tal state and local tax burden in Utah is 9.6 percent, a full percentage point below the average for all states. Income taxes on military pensions constitute an estimated 10 percent of military retirees' state and local tax burden in Utah.

4.1 State Income Tax Policies for Military Retirees

In 2015, military pensions constituted an estimated 34 percent of Utah military retirees' total income.⁷ Most states have income tax provisions that favor military retirees, perhaps as an economic development strategy and to honor this segment of the veteran population. Utah is one of seven states that does not specifically address military pensions in its individual income tax code (see Figure 10). However, military retirees in Utah may qualify for income tax reductions on the basis of their age and income or for other reasons.

The most common stance among the 43 states that tax personal income is to exempt a portion of military pensions. As of 2015, 19 states exempted up to a threshold amount ranging from \$2,000 to about \$41,000. Another 15 states offered a full exemption on military pensions with no upper limit.

Figure 10: State income Tax Policy for Military Retiree Pensions in 2015



Not shown: Alaska, no state income tax; Hawaii, full exemption
 Source: National Conference of State Legislatures, Military Officers Association of America.

The simplistic characterization of military retiree exemptions in Figure 10 is current as of tax year 2015 based largely on an assessment by the Military Officers Association of America (Frost, Golden, Ostrom, & Rosner, 2015). The following year, Missouri's partial (90 percent) exemption was raised to 100 percent. From 2016 to 2018, South Carolina will phase in a full exemption to replace its current partial exemption.

The National Conference of State Legislatures (2015) published a review of how each state addressed military pensions in terms of income tax policy in tax year 2014, with some notes for later years. That review is a valuable reference for its succinct descriptions of partial state income tax exemptions for military pensions.

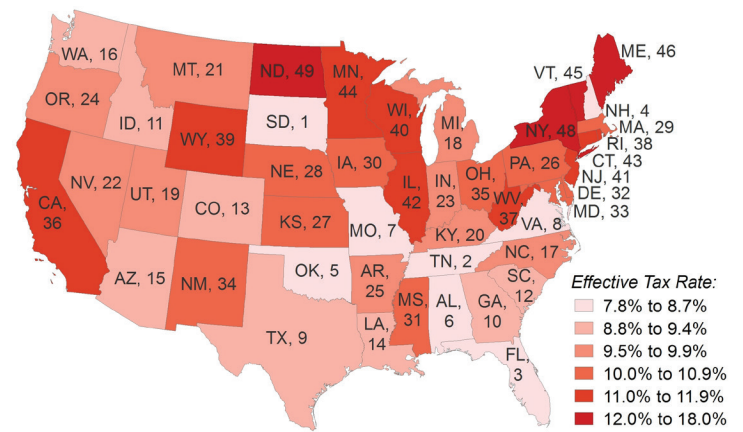
As noted, a state may exempt military pensions in order to reward military retirees for their service and to attract and retain them as residents for their contributions to the state's economic and fiscal health. Another policy consideration involves state pensions. In *Baker v. Kansas* (1992) the U.S. Supreme Court directed that state income tax code not treat state pensions more favorably than military pensions (National Conference of State Legislatures, 2015).⁹ Thus states with the intention of exempting state pensions would also need to exempt military pensions.

4.2 Review of Recent Changes in State Income Tax Exemptions for Military Retirees

In the past two decades, several states have made income tax policy changes for military pensions. One element of this trend is the competition among states to attract and retain military retirees (Povich, 2015).

At least five states have reduced state income taxes for military pensions since 2000. During 2015 alone, Connecticut and South Carolina replaced their partial exemptions of military pensions with full exemptions without income limits; Maryland

Figure 11: Overall State and Local Effective Tax Rates, 2015



Not shown: Alaska, 18.0%, rank 50; Hawaii, 12.9%, rank 47
 Source: U.S. Census Bureau, Quarterly Summary of State and Local Taxes; U.S. Department of Commerce, Bureau of Economic Analysis.

doubled its state income tax exemption threshold for military income to \$10,000; and Minnesota debated a full exemption, which passed the House but not the Senate. Wisconsin and Ohio implemented full exemptions for military retirement income beginning in 2001 and 2008, respectively.

Two states recently funded economic analyses of the fiscal implications of proposed state income tax exemptions for military retirement pay. A 2016 study from South Carolina and a 2009 study from New Mexico both estimate the economic and fiscal impacts of a full state income tax exemption for military retirees. At present, New Mexico retains its partial exemption based on age and income, with no special provisions for military pensions. As previously mentioned, South Carolina is phasing in a full exemption.

At least one state has moved in another direction, increasing state income tax liabilities for military pensions. In 1998, after less than 10 years with a full exemption for military retirees, Kentucky moved to a generous partial exemption of up to \$41,110 in pension income.

4.3 Overall State and Local Taxes: Utah and Other States

A full state income tax exemption for military pensions in Utah, which currently has no exemption, would relieve approximately one-tenth of a military retiree's total individual tax burden from state and local taxes.⁹ Military retirees are also directly affected by state and local taxes other than state income taxes on military pensions. At 9.6 percent of personal income in 2015, the overall non-federal tax burden in Utah was somewhat better than the 50-state average of 10.6 percent, considering a full range of income, sales, property and all other taxes assessed by state and local governments (see Figure 11). These effective tax rates are averages for all taxpayers in each state, not specifically for military retirees.

In 2015, Utah's effective tax rate for state personal income taxes alone (2.8 percent) was the 13th highest in the U.S., which averaged 2.3 percent (see Appendix Tables A5 and A6). While state income tax rates on military pensions are of obvious importance to retirees, state tax rates on other income also affect the sizable share of military retirees who find employment after retiring from the armed forces, as well as any military retirees with income from sources such as financial investments, real estate or retirement payments besides military pensions. Thus, states with low effective income tax rates, especially those without an income tax, are attractive to military retirees. Utah's income tax

rate is the same for military pensions and most other sources of income.

Seniors, people with low incomes, military retirees, other veterans and those with other circumstances addressed by state and local tax provisions may enjoy tax rates lower than statewide averages for the various state and local taxes. Well-informed current and potential residents of any state may be able to estimate their own expected tax liability in states where they consider living, besides comparing statewide averages, such as those presented here.

Section 5

State Tax Policy and Migration of Military Retirees

This summary of existing research related to military retiree taxation and migration in the U.S. is divided into two sections: economic and fiscal impact studies evaluating state income tax exemptions and academic research on retiree migration, with emphasis on veterans generally and military retirees in particular.

State revenue losses from income tax exemptions are substantial. However, income tax revenue losses from a new or expanded exemption may be fully offset after several years in the event that the exemption causes a substantial increase in the number of military retirees living in the state. New arrivals would generate income tax revenue directly, through taxes paid on their non-pension incomes, and indirectly, by spending their pensions at establishments that employ people subject to state income tax. Increased migration into a state by military retirees would also boost state and local tax revenues from property tax, sales tax and other non-income taxes.

Existing research is insufficient to predict the size of a possible migration response by military retirees due to an income tax policy change. The literature on retirees and veterans in general, and military retirees in particular, indicates military retirees are motivated by a variety of personal and financial factors. State income tax policy is a less important factor that only sometimes produces discernible changes in where people belonging to these groups live. Primary reasons for military retirees to live in a state are proximity to family; prior experience in the state; quality of life preferences, such as recreational opportunities; access to military base amenities; affordable cost of living; favorable overall tax burden; and superior government-provided services and infrastructure, such as education and transportation.

5.1 Economic and Fiscal Impact Studies on State Income Tax Exemptions for Military Pensions

Substantial economic analyses are available for two states where full income tax exemptions for military pensions have been considered or implemented—South Carolina and New Mexico.

South Carolina:

In 2016, South Carolina will begin to phase in a full income tax exemption on military pensions to supplement its partial exemptions for retirement income and individuals age 65 and above (Carey & Mikota, 2016). Analysis using REMI PI+, a dynamic economic model, and data through 2015 demonstrates positive economic and fiscal impacts are possible in the long run, following short-term losses to state and local governments, only if the tax change results in increased net migration of military retirees into the state. Military retirees bring job skills, families, above-average incomes and other assets for the benefit of the private sector and state and local governments.

The study's dynamic scoring approach predicts changes in people's behavior in response to policy incentives. Since family, lifestyle, employment, financial and other key factors besides state income tax policy affect migration, the size of a military retiree migration response, if any, was difficult for the researchers to predict.

Four hypothetical migration responses are tested: none, a 5 percent increase, a 10 percent increase and a 15 percent increase. These increases in the total military retiree population are assumed to be fully realized in three years, which implies double-digit increases in annual migration. All three scenarios with significant migration responses show a short-term loss in state revenue from the tax cut, followed by positive fiscal impacts in the long term as economic impacts and migration accumulate. Breakeven for state government alone happens 11 years after the exemption phase-in begins, given a 5 percent increase in

military retirees, and five years after phase-in for the 15 percent scenario. For state and local government combined, breakeven occurs five years after the exemption phase-in begins, for both the 5 percent and 15 percent scenarios.

A second study with more conservative migration assumptions evaluates the same full income tax exemption as Carey and Mikota (2016) in South Carolina (Von Nessen, 2016). Negative economic and fiscal impacts are expected unless the tax change results in increased migration of military retirees into South Carolina. If the tax policy adjustment eventually results in a hypothetical 5 percent increase in the total number of military retirees in the state, initial net losses in state revenue would likely give way to positive fiscal impacts about 10 years from the tax exemption's implementation. These estimates rely on economic modeling in IMPLAN, a static input-output impact model.

New Mexico:

Using data through 2007, researchers at New Mexico State University evaluated possible economic and fiscal impacts of a proposal to remove the limit on New Mexico's partial income tax exemption for military pensions, making it a full exemption.

Of three migration response scenarios, only the highest (with a 5 percent increase in the military retiree population) would indirectly generate enough state and local tax revenues in the short term (within three years of implementation) to offset direct losses in state income tax revenues from the proposed exemption increase (Popp & Starbuck, 2009). A middle scenario (3 percent increase) would likely break even shortly after five years. The most conservative migration scenario (1.5 percent increase) would result in a net loss of income tax revenue that only widens in the long term. These findings are also based on IMPLAN analysis.

Reaching fiscal neutrality in terms of state income tax revenues alone would require about 40 percent more military retiree migration to New Mexico in response to a tax cut than would be required if offsetting revenue increases from gross receipt taxes and corporate income taxes are included.

The main source of uncertainty in the analysis revolves around how many military retirees will actually move into New Mexico. "A review of the literature indicated that tax considerations do play a role in determining where retirees settle, but that they are not the only, or necessarily the most important, consideration" (p. 21). Tax considerations are one of many likely factors driving retirement residence decisions, including proximity to a military base, location and duration of last assignment, access to medical care, family location, climate and recreational amenities (e.g., mild winters and coastal locations) and areas with growing populations.

5.2 Academic Literature on Interstate Migration: Retirees, Veterans and Military Retirees

The critical question regarding the economic and fiscal impacts of an income tax exemption for military pensions is whether a substantial increase in a state's population of military retirees will result. We selected several studies that address the extent to which people move between states to follow financial incentives, in particular tax incentives.

Findings are mixed and generally suggest a weak migration response is possible but not guaranteed. The studies also offer results about military retirees' reasons to choose to live in one state rather than another. Like other veterans and retirees, military retirees generally consider many personal and economic factors, among which tax policy is present but not foremost.

Since an estimated 80 percent of military retirees living in Utah were born in another state or country (see Table 10), and since veterans in retirement tend to be more mobile than non-veterans (Cowper et al., 2000), it stands to reason that military retirees deciding where to live may be open to considering the merits of more than one state.

Below we review nine of the most relevant studies from our literature review, most from academic journals. The topic of each is given in bold, along with years for the data upon which its findings are based.

Reasons military retirees choose to live in South Carolina and other states, 2009 to 2013: Perhaps 40 percent of veterans in South Carolina chose to live in the state after retiring in order to have easy access to veterans' services at the state's military installations (Von Nessen, 2015). Active-duty service in a state makes a retiree more likely to live there during retirement. Significant positive relationships exist between the number of military retirees in a state and both the number of active duty members stationed there and the state's performance in AARP health care ratings.

Reasons for veteran migration, 1960 to 1990: In choosing a place to live, veterans are attracted to high-amenity destinations with lifestyle benefits and a low cost of living (Cowper et al., 2000). Amenities include mild winters and recreation opportunities. A disproportionate number of veterans live in the Sunbelt and Pacific Northwest. Veteran retirees are more likely than non-veteran retirees to move between states during retirement.

Reasons for retiree moves, 1992 to 2000: Moves near retirement age are commonly affected by life events, such as marital change, job change, significant health declines and becoming empty nesters, according to multiple surveys of each of about 5,000 households during the 1990s (Farnham & Sevak, 2002).

Property tax rates and migration, 1992 to 2000: Longitudinal data for people in their fifties and sixties suggest financial concerns were a limited part of the motivation for retiree migration in the 1990s (Farnham & Sevak, 2006). Households that moved between states reduced their property taxes by an average of \$115. However, property tax savings alone are insufficient to financially justify moving.

Retirement in rural areas, early 2000s: Retirees choose to live in rural areas primarily on the basis of quality of life preferences and to be near family members (Brown & Glasgow, 2008). Quality of life considerations include community attributes, such as slower pace and small-town feel, as well as natural amenities, like weather, scenery and recreation opportunities. Less common primary reasons for moving to a rural area were economic factors and attachment to the area from prior experience. These findings are from in-depth surveys from 2002 to 2005 of about 300 people age 60 and above regarding why they chose to live in rural communities.

Reasons for military retiree location, 1980s: Military retirees in the 1980s were more likely to live in areas with mild winters, shorter distances from a military base, higher general population growth and lower local taxes per capita (Jackson & Day, 1993). Together, these factors explain about one-third of the variation in military retiree concentrations by county.

State income tax policy and retiree migration, 1970 to 2000: Considering several types of tax breaks from 1970 to 2000,

there were no consistent patterns of state income tax policy affecting elderly migration between states (Conway & Rork, 2012). According to U.S. Census Bureau data, seniors' choices of where to live do not appear to be associated with state income tax credits or deductions that target pensions, social security income or income for people above age 60.

High-income retirees and income tax rates, 2000 to 2007: For people with very high incomes (\$500,000 and above), retirement-age individuals (age 65 and above) are more likely than younger individuals to migrate to another state in response to an increase in the state income tax rate (Young & Varner, 2011). One reason may be that seniors are less constrained by employment obligations. The study design could not determine whether the effect of a reduction in state income tax rates on people moving into a state is similar to the effect of tax rate increases on people leaving.

State income tax policy and migration, controlling for location, 1992 to 2002: Comparing neighboring states with similar amenities, natural environments and proximity to family members, low state income tax rates are one of several significant factors affecting which state people choose (Coomes & Hoyt, 2008). Other significant factors are lower sales tax rates, higher government spending for roads and fire departments and higher median income.¹⁰ In other words, income tax policy matters to migration, at least in the absence of family, lifestyle and other key location considerations.

Section 6

Comparison of Utah to Other States in Terms of Military Retirees and State Characteristics

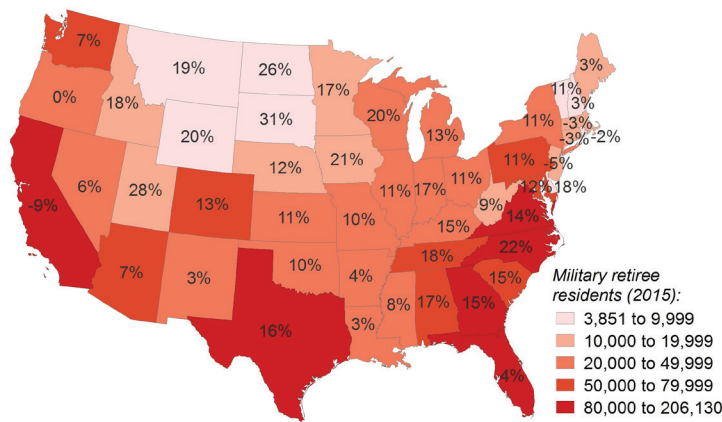
To provide context for the literature review, this section compares Utah to other states in terms of its number of military retirees and many other characteristics that research suggests affect how many military retirees choose to live in a state. The comparison among states begins with military retiree and general population levels and growth. The analysis documents the number of active duty, reserve and guard personnel, many of whom become military retirees in the same state where they served. Veterans are the next focus, including military retirees. The section concludes by pointing out several economic, policy and quality of life variables that may influence potential military retiree migrants to or from Utah. Two detailed tables supporting this discussion are in the Appendix (see Tables A5 and A6).

Utah has fewer military retirees than most states, even as a share of its adult population. Correspondingly, Utah receives less military pension income. However, Utah's military retiree population and pension income have grown faster than those of other states since 2001.

Utah has an impressively large contingent of reserve and guard members relative to its population. The state receives more income than most states from well-paying civilian jobs with the Department of Defense. However, even in proportion to the size of Utah's economy and population, the state's military presence is not as substantial as most states' in terms of military installations, defense spending, active-duty personnel and number of veterans. Yet, if the pool of veterans in Utah is not large, an above-average share of them have earned full military retirement.

Military retirees are likely attracted to Utah because of its remarkable job market and robust population growth. Though slightly above average, the cost of living in Utah is sustainable considering military retirees' elevated incomes. While Utah's income tax assessment on military pensions is higher than most states', the overall individual tax burden considering several state and local taxes is just below the median.

Figure 12: Military retirees by state, number and ten-year growth



Not shown: Alaska, 19% growth; Hawaii, 15% growth; both, 10,000 to 19,999 military retirees
 Source: U.S. Department of Defense, Statistical Report on the Military Retirement System.

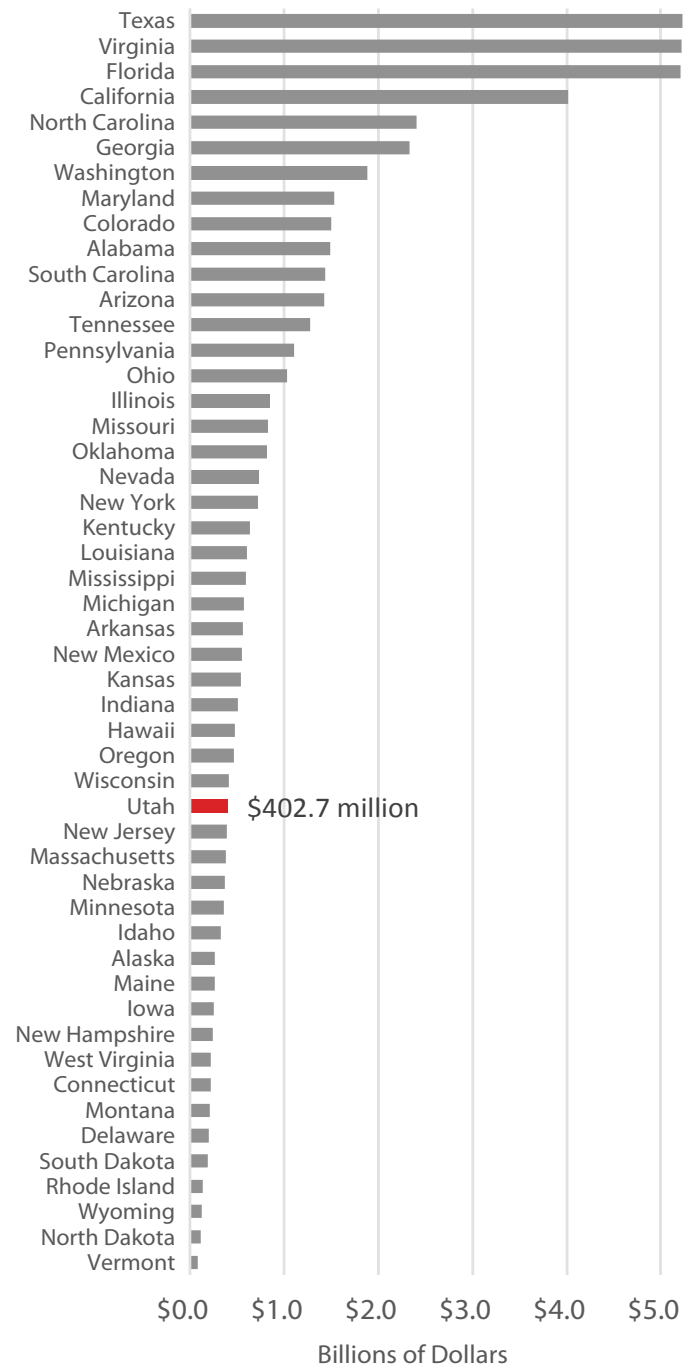
Ultimately, personal and lifestyle factors may prevail for most military retirees considering more than one state. While health care, climate and several other measures have been reviewed, the data here does not encompass other important considerations, such as proximity to family.

Military retirees: At 28 percent from 2005 to 2015, Utah's ten-year growth in the number of military retirees living in the state was the second highest of all states (see Figure 12), largely driven by Utah's unmatched general population growth during that period. With 16,963 military retirees in 2015, Utah ranked 35th, far behind Texas, Florida and California, but well ahead of New England and other states with relatively small populations.

Military pensions: Consistent with its share of the country's military retirees, Utah ranks 32nd among states for the amount its retirees receive from military pensions: a total of \$402.7 million in 2015, not including \$27.8 million in payments to survivors of military retirees (see Figure 13). Section 1 addressed the economic impact in Utah of this significant flow of federal dollars into the state. Consistent with the surge in Utah's military retiree population over the past decade, the growth in military pension dollars received in the state from 2005 to 2015 was the fourth highest in the country.

Military installations and organizations: Utah is home to Hill Air Force Base, a major enterprise that anchors the military ecosystem in Utah. Other noteworthy installations include Tooele Army Depot, Dugway Proving Grounds, Camp W. G. Williams, Fort Douglas and the NSA Data Center in Bluffdale. Besides training at these locations, National Guard, Reserve and ROTC units operate on college campuses and other sites throughout the state. Though its share of military assets and personnel is smaller than many states', the armed forces have a robust presence in Utah, particularly the Air Force, Army, Guard and Reserves.

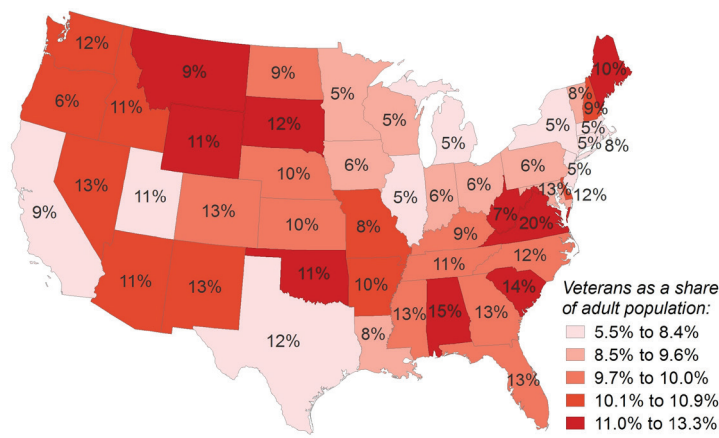
Figure 13: Annual Military Pension Income by State, 2015



Source: U.S. Department of Defense (2015b).

Veterans: Over 150,000 veterans live in Utah. That large number represents the lives, abilities and networks of people of many ages and backgrounds who are a resource to the state, including many military retirees. To put Utah's veteran component in perspective, 36 states have more veterans (see Appendix Table A6). Taking veterans as a share of the adult population, Utah's 7.2 percent is the sixth lowest in the country. However, an above-average share of Utah veterans have earned full military retirement, 11.2 percent, compared with 9.7 percent nationwide (see Figure 14).

Figure 14: Veterans and Military Retirees in 2015



Not shown: Alaska, 13.3% veterans, 14.5% retirees; Hawaii, 10.8% veterans, 14.6% retirees

Source: U.S. Department of Veterans Affairs, National Center for Veterans Analysis and Statistics.

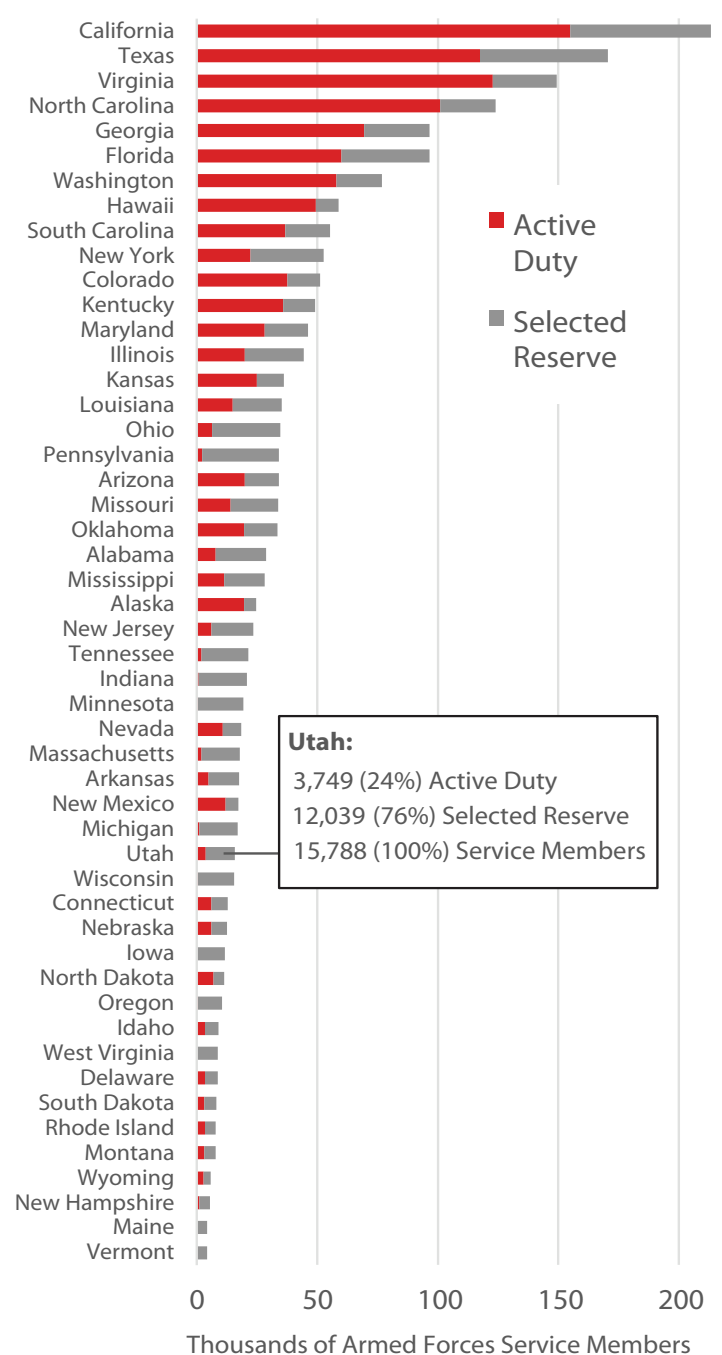
Active duty, reserve and National Guard personnel serving in Utah: People joining the ranks of military retirees in Utah come from the pool of active duty, reserve or guard service members, particularly those living in the state at the time they become eligible for their military pensions. Utah’s shares of U.S. totals for these groups—military retirees and active duty, reserves and guard members—all fall between 30th and 35th in state rankings (see Appendix Table A6).

An estimated 3,749 active-duty service members were stationed in Utah as of the most recent statewide count, in September 2014 (see Figure 15). At that time, Utah was home to a much larger number of “Selected Reserve” members, 12,039 individuals with ongoing part-time commitments in Reserve or National Guard units in the state—people eligible for active-duty deployments. A noteworthy aspect of Utah’s military involvement is the high share of its adult population serving in reserve or guard units. Utah is among the top third of states by this measure.

Defense spending: A state’s active duty count and defense spending share are valuable proxy measures for the relative number and size of military installations in a state. Military bases are considered a key draw for military retirees choosing where to live (Von Nessen, 2015). For example, they provide veterans with commissary privileges, recreational opportunities and access to preferred financial institutions and medical care. Communities near bases tend to feature robust active-duty and veteran populations and an environment where military retirees feel at home.

Military installations also employ many military retirees, either directly or through military contracts. Nearly one-fourth of military retirees who are employed in Utah work for the federal government as civilians, whether in the Department of Defense (DoD) or for another agency. That share is markedly higher than

Figure 15: Active Duty and Reserve Members by State, 2015



Source: U.S. Department of Defense (2015b).

the share of all employed Utah adults with federal jobs, which is only 4 percent.¹¹

Considering Utah’s relatively modest total defense spending and personnel counts, the state does better than one would expect in terms of funding for DoD civilian jobs. With \$1.8 billion in DoD civilian pay, Utah ranks 14th among all states and 2nd behind Washington in the continental West (U.S. Department of Defense, 2015a). Comparable data is not available regarding payroll from defense contractors or the prevalence of military retiree employment by defense contractors.

At 2.3 percent of Utah's economy, total DoD payroll and contract spending was very near the median among states in terms of the share of state GDP (Gross Domestic Product) that defense spending constituted in fiscal year 2014, the most recent year available (see Appendix Tables A5 and A6). Out of \$418 billion spent in all 50 states that year, Utah's \$3.3 billion places it somewhat below average with a rank of 31. Defense spending roughly indicates access to on-base resources for military retirees, as well as economic opportunity for those involved with DoD contractors and civilians.

Population: A fundamental demographic measure of states' livability is population growth. It captures a rather complete composite of factors that support natural increase and/or attract new arrivals to a state, including economic vitality, cultural elements, recreational opportunities and affordability. U.S. Census Bureau estimates for the ten-year period ending in 2015 place Utah first in that regard with a 23 percent increase in the state's adult population, compared to a 12 percent 50-state average (see Appendix Tables A5 and A6).¹² Military retirees are a special population that does not always grow and migrate in lockstep with the rest of the population. However, researchers in New Mexico have observed that population growth is among a handful of key factors that make an area more attractive to military retirees choosing where to live (Popp & Starbuck, 2009)

Economy: Utah's economic health affects many facets of military retirees' quality of life. Like most people, military retirees may be swayed by financial considerations about where they will live, although various other personal and family motivations tend to dominate the decision at that stage of life (Brown & Glasgow, 2008; Carey & Mikota, 2016). General financial and economic considerations may offset or outweigh tax policy incentives targeting retirees (Farnham & Sevak, 2006).

Utah's economy benefits from the contributions of the estimated 40 percent of military retirees in the state who are active in the labor market (see Appendix Table A3). Utah's unemployment rate, even through some turbulent years from 2005 to 2015, averaged below 5 percent, eighth lowest in the country. Finding a job has been a readily surmountable challenge for most military retirees in Utah: from 2010 to 2014, the unemployment rate among military retirees in the labor force was a mere 1.8%, about one-third of the statewide unemployment rate during those years (see Appendix Table A3). Of course unemployment rates do not measure the quality of work opportunities or adequacy of pay.

A fairly comprehensive measure of the cost of living by the U.S. Bureau of Economic Analysis shows a representative basket of goods in Utah being slightly more affordable than its average price nationwide (see Appendix Table A5). Last updated in 2014, Utah's "regional price parity" index value was 97, compared

with 100 for the U.S. With states' cost of living ranging from 87 to 117 by this measure, Utah placed above the median as the 28th most affordable state.

Military retirees fare better than most Utahns in terms of lifestyle affordability. Military retirees' earning potential and regular pension income far exceed that of other retirees in Utah and that of the state's general population including all demographics (see Appendix Table A3).

Tax policy: State income tax policies regarding military pensions and overall state and local tax burdens were reviewed in Section 4, above. Tax policy may affect how many military retirees move to and from Utah.

Health care: Health care becomes a priority for many middle-aged adults. At 38th among the states, Utah did not rank particularly well for the composite metric of quality of care, affordability, access, choice, support for family caregivers, quality of life and other issues in AARP's most recent Long-Term Health Care Scorecard (Reinhard et al., 2014).

While AARP constructed a fairly comprehensive measure of people's experience with each state's health care system, the focus was on disabilities, chronic health situations and long-term care options. This focus is relevant to retirees looking ahead, while those in good health would likely have a more immediate interest in other aspects of health care, such as regular check-ups and treatment for temporary or less serious health challenges. Additional research could explore several metrics and sources regarding outcomes for and perceptions about states' health care performance.

AARP's feedback about health care statewide does not specifically reflect the experience military retirees have with Tri-Care, the VA Medical Center, Hill Air Force Base and other public and private options in Utah on which military retirees rely. They have access to special military providers, as well as a large network of private medical professionals and facilities approved by their insurance. Also, the health care needs of military retirees as a group may differ from those of the broader Utah population, based on demographic characteristics and occupational hazards.

Climate and lifestyle: With regards to lifestyle amenities and climate, Utah boasts world-class outdoor attractions for every season, cultural and entertainment opportunities and winters many find manageable or even enjoyable. Parts of the state periodically suffer from unusually poor air quality, and other local and statewide challenges may detract from residents' quality of life.

Many livability considerations would be relevant to the discussion of why military retirees choose to live in a state and how policies such as state income tax treatment stack up against other retiree priorities. Most of that discussion is outside the scope of this report. This study includes one measure each for

health care and weather as placeholders for an array of important factors. Some would be difficult to analyze, such as social opportunities and family connections.

Further research: This section has presented and reviewed data on how Utah compares to other states in terms of income tax policies for military pensions and many key state characteristics that may affect where military retirees live. This basic descriptive review stops short of a rigorous, original analysis of which state-level measures are most associated with the total number of military retirees in a state or with military retiree migration flows between states.

Section 7

Conclusion

This report presented trends in Utah's military retiree population and explored various demographic and financial characteristics of this unique group of retirees. Following careers serving their country in the Armed Forces, they proceed to contribute a great deal to Utah. Like all residents, they place some demands on government infrastructure and programs.

Many states look for ways to accommodate military retirees and encourage more to come and stay. State income tax treatment of military pensions is one policy factor that may influence where military retirees choose to live.

Our findings support economic development arguments for retaining military retirees and attracting more of them to Utah. Among other contributions, their federal pension dollars and

Valuable research beyond the scope of this report could include preparing regression models to estimate the relative importance of various state policies and characteristics. The ideal research design would rest on household or individual data, such as that from the American Community Survey for all states, supplemented with the type of state-level data explored above. State characteristics would be linked with household and individual records based on their current and former states of residence.

second careers are a boon to the state's economy. Military retirees' net financial impact on Utah's state and local governments is substantial and positive.

The study stops short of predicting a favorable impact on government revenues and expenses in Utah from exempting military pensions from the state income tax. Estimates suggest Utah's military retiree population would need to more than double to offset the loss in state tax revenue from an exemption for military pensions.¹³ However, the size of any migration response to tax reform in addition to current growth trends is uncertain. Military retirees evaluate Utah as a retirement option based on many policy and non-policy reasons besides its income tax on military pensions.

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Appendix: Tables and Methodology Notes

Following an explanation of Section 1 methods below, Table A1 and Table A2 document trends in the number of military retirees in Utah and the U.S. since 2001, which support Figures 3 through 5 in Section 2.

Table A3 presents full results from an original analysis of U.S. Census Bureau data to create an economic and demographic profile of military retirees in Utah. Table notes elaborate on Section 3 methods. Table A4 provides supporting information on statistical significance and standard errors, the latter of which can be used to find margins of error for the estimates presented in Table A3.

Finally, the appendix includes companion multi-page tables with state measures and rankings related to military retirees and interstate migration to support the discussion in Section 4 and Section 6. Table A6 presents rankings for every measure introduced in Table A5.

Methodology for Economic and Fiscal Impact Analysis

Below is additional information on the models and methods used in the economic and fiscal analysis in Section 1.

REMI Economic Software: Regional Economic Models, Inc.'s Policy Insight model (REMI PI+) creates dynamic economic simulations that incorporate the economic and demographic characteristics of Utah's 29 counties and model the links between counties and with other states. REMI produces economic, population and labor market impacts with year-by-year estimates of the regional effects of specific economic or policy changes.

REMI has many complex, interrelated submodels and features. It keeps track of different components of the Utah population and accounts for activity in hundreds of economic subsectors within 23 major industries. The model estimates in-state and out-of-state spending by individuals and businesses in Utah. Labor, capital, financial and product markets interact as economic changes ripple through the economy, creating a multiplier effect. The size and composition of the population and economy adjust over time.

Impact results from REMI include jobs, GDP and personal income (see Table 4). They apply only to the year indicated; for example, income people received during 2015. REMI does not distinguish between full-time and part-time jobs. The model incorporates average shares of part-time jobs in each industry. GDP, gross domestic product, is the same as value added. REMI estimates how much of the value of goods and services produced in the U.S. in 2015 was created in Utah due to

military pensions received there. Personal income includes all sources of income, such as earnings, investments and government transfer payments.

Fiscal impacts: The fiscal impacts presented in this analysis are based on revenue and expenditures by state and county governments, as well as school districts. Due to data limitations, revenue and expenditures for cities and towns are not included.

Fiscal impacts were estimated based on the relationships between earnings and selected state and local tax collections over 16 years (2000–2015) using data published by the Bureau of Economic Analysis, the Utah State Tax Commission and the State Auditor. These relationships are expressed as ratios that represent effective state and local tax rates. These ratios are applied to the total earnings impact estimates.

To estimate the impact on state tax revenue, we estimated effective tax rates for individual income tax, state sales tax and corporate income tax. To estimate the impact on local tax revenues, we calculated effective tax rates for local sales taxes and property taxes.

Our fiscal impact analysis also takes into consideration government expenditures to provide public services and other government functions. These estimates are based on average per-capita expenditures by state and local governments. For K-12 education, expenses are estimated based on the population of school-aged individuals, rather than total population.

Fiscal impacts are based on military retirees' personal income, which averaged about three-fourths of their total household income. Personal income excludes income from spouses and adult children living at home, who often have some financial independence. For consistency, since we omit state income and taxes paid by other adults in military retiree households, we also omit state expenditures on behalf of these adults. In particular, fiscal impact results do not include state higher education spending, which primarily serves adults ages 18 to 30. As noted, we include public school expenditures for dependent minors in military retiree households.

Net fiscal impacts equal estimated tax revenue received from a group of individuals minus estimated government expenditures for those individuals and other members of their households.

The fiscal impact estimates generated in this report should be viewed as rough estimates. This methodology assumes a linear relationship between state and local taxes and earnings. It also assumes individuals pay taxes and consume government services at rates similar to other people of their age and income.

Table A1: Military Retirees in Utah, 2001–2015

Year	Persons	Annual Growth	Share of Utah Adult Population	Share of U.S. Military Retirees	Military Retirees Age 65 and Above		
					Persons	Share of all Utah Military Retirees	Share of U.S. Military Retirees Age 65+
2001	11,900	--	0.76%	0.63%	5,212	43.8%	0.64%
2002	12,099	1.7%	0.76%	0.64%	5,415	44.8%	0.65%
2003	12,456	3.0%	0.77%	0.65%	5,445	43.7%	0.66%
2004	12,779	2.6%	0.77%	0.66%	5,594	43.8%	0.67%
2005	13,246	3.7%	0.78%	0.68%	5,763	43.5%	0.68%
2006	13,702	3.4%	0.79%	0.70%	5,911	43.1%	0.70%
2007	14,250	4.0%	0.80%	0.72%	6,098	42.8%	0.71%
2008	14,707	3.2%	0.81%	0.73%	6,425	43.7%	0.74%
2009	15,095	2.6%	0.81%	0.75%	6,754	44.7%	0.76%
2010	15,409	2.1%	0.81%	0.76%	7,087	46.0%	0.79%
2011	15,669	1.7%	0.81%	0.76%	7,410	47.3%	0.81%
2012	15,937	1.7%	0.81%	0.77%	7,955	49.9%	0.84%
2013	16,280	2.2%	0.81%	0.78%	8,404	51.6%	0.86%
2014	16,625	2.1%	0.82%	0.79%	8,736	52.5%	0.87%
2015	16,963	2.0%	0.81%	0.80%	8,997	47.0%	0.88%

Source: Department of Defense Office of the Actuary (DoD Actuary) and U.S. Census Bureau.

Table A2: Military Retirees in the U.S., 2001–2015

Year	Persons	Annual Growth	Share of Adult Population
2001	1,890,985	--	0.891%
2002	1,894,616	0.2%	0.882%
2003	1,909,523	0.8%	0.880%
2004	1,924,328	0.8%	0.877%
2005	1,944,111	1.0%	0.876%
2006	1,957,478	0.7%	0.871%
2007	1,983,467	1.3%	0.873%
2008	2,002,852	1.0%	0.871%
2009	2,022,166	1.0%	0.869%
2010	2,035,921	0.7%	0.866%
2011	2,051,939	0.8%	0.863%
2012	2,066,861	0.7%	0.860%
2013	2,086,179	0.9%	0.859%
2014	2,107,336	1.0%	0.859%
2015	2,129,774	1.1%	0.860%

Source: DoD Actuary and U.S. Census Bureau.

Table A3: Comparative Profile of Military Retirees in Utah, 2010–2014

(Dollar amounts adjusted for inflation to 2015 dollars)¹

Topic	Item	Active-Duty Retirees ^{2,3}	Reserve Retirees ^{3,4}	All Military Retirees ^{5,6}	Non-Military Retirees ⁶	Adult Population ⁷
Population and sample	Individuals in Utah	11,969	4,015	15,984	148,771	1,969,126
	Individuals in sample	597	120	717	9,157	98,403
Age	Age, mean	63.4	75.4	66.4	69.2	43.1
	Age, median	65	77	67	69	40
	Percent age 17 or less	0.0%	0.0%	0.0%	0.3%	0.0%
	Percent age 18 to 34	0.0%	0.0%	0.0%	2.1%	39.0%
	Percent age 35 to 44	5.9%	0.0%	4.5%	1.6%	18.3%
	Percent age 45 to 54	19.3%	0.0%	14.4%	3.8%	15.6%
	Percent age 55 to 64	23.8%	14.0%	21.3%	22.5%	13.3%
	Percent age 65 to 74	36.7%	18.2%	32.1%	36.7%	7.9%
	Percent age 75 to 84 ⁸	12.1%	60.3%	24.2%	23.5%	4.2%
	Percent age 85 and above	2.2%	7.5%	3.5%	9.5%	1.7%
Sex	Female	2.7%	2.3%	2.6%	48.1%	49.8%
	Male	97.3%	97.7%	97.4%	51.9%	50.2%
Race and ethnicity	White, non-Hispanic ⁸	94.0%	95.7%	94.4%	94.7%	88.0%
	Hispanic, non-white or more than one race ⁸	6.0%	4.3%	5.6%	5.3%	12.0%
Place of birth	Utah	15.7%	31.2%	19.6%	32.9%	32.2%
	Ten western states, not including Utah ⁸	13.5%	13.6%	13.5%	13.7%	12.5%
	U.S. outside the continental West	68.6%	55.2%	65.2%	50.4%	48.1%
	Outside the U.S.	2.3%	0.0%	1.7%	3.1%	7.3%
Marital status	Married	82.7%	69.1%	79.3%	62.9%	60.1%
	Widowed, divorced or separated	14.6%	26.8%	17.6%	32.4%	15.5%
	Never married	2.8%	4.1%	3.1%	4.7%	24.4%
Household size and children⁹	Number of people living in home, mean	2.60	2.11	2.48	2.25	3.03
	School age (5–17) persons in home, mean	0.29	0.11	0.25	0.18	0.70
	College age (18–29) persons in home, mean ⁸	0.22	0.11	0.19	0.16	0.52
	Percent with 1+ children under 18 in home	17.3%	6.7%	14.6%	9.3%	42.7%
	Percent with 1+ school-age person in home	17.5%	6.7%	14.8%	9.6%	34.4%
	Percent with 1+ college-age person in home	17.4%	8.1%	15.0%	11.6%	32.9%
Educational attainment	Less than high school	0.9%	3.9%	1.7%	7.2%	9.6%
	High school or GED, no college	12.2%	15.9%	13.1%	24.7%	24.3%
	Some college	46.6%	26.5%	41.5%	34.7%	39.6%
	Bachelor's degree only	17.9%	27.0%	20.2%	19.3%	18.0%
	Graduate or professional degree	22.3%	26.7%	23.4%	14.2%	8.4%
Employment status	Percent in the labor force	47.5%	16.4%	39.7%	20.8%	69.6%
	Percent employed	45.9%	13.9%	37.9%	19.5%	64.9%
	At a for-profit company, % of employed	42.6%	49.8%	43.7%	46.4%	68.3%
	In government, percent of employed	43.6%	25.2%	40.7%	35.0%	15.7%
	At a nonprofit, percent of employed	4.2%	5.9%	4.5%	8.2%	7.0%
	Self-employed, percent of employed	9.6%	19.1%	11.1%	10.4%	9.0%
	Percent unemployed	1.6%	2.5%	1.8%	1.3%	4.7%
	Percent not in the labor force	52.5%	83.6%	60.3%	79.2%	30.4%
Homes⁹	Home owners	89.6%	96.6%	91.4%	87.7%	69.6%
	Renters	10.2%	2.6%	8.3%	11.2%	28.8%
	Other (not owners, no rent)	0.2%	0.8%	0.3%	1.1%	1.5%
	Home value, mean ⁸	\$262,309	\$253,385	\$259,886	\$245,902	\$260,098
	Home value, median ¹⁰	\$224,085	\$199,009	\$211,401	\$207,077	\$211,401

Table A3: Continued

Topic	Item	Active-Duty Retirees ^{2,3}	Reserve Retirees ^{3,4}	All Military Retirees ^{5,6}	Non-Military Retirees ⁶	Adult Population ⁷
Income per adult (age 18+)	Retirement income, mean	\$30,359	\$29,238	\$30,077	\$20,766	\$1,765
	Retirement income, median	\$22,827	\$23,072	\$22,827	\$14,282	\$0
	Non-retirement income, mean	\$44,576	\$28,280	\$40,483	\$24,661	\$33,505
	Non-retirement income, median	\$31,379	\$15,898	\$25,103	\$16,467	\$20,565
	Total income, mean	\$74,934	\$57,519	\$70,560	\$45,428	\$35,270
	Total income, median	\$62,843	\$44,662	\$56,377	\$34,710	\$22,602
Household income⁹	Total household income, mean	\$103,865	\$76,375	\$96,804	\$74,687	\$75,470
	Total household income, median	\$91,053	\$55,540	\$79,860	\$59,896	\$60,148
Poverty	Percent below poverty line	1.4%	2.6%	1.7%	3.6%	13.4%
	Income-to-poverty-line ratio, mean ¹¹	428%	306%	411%	364%	306%
	Income-to-poverty-line ratio, median ¹¹	501%	305%	501%	389%	305%
Government programs	Receiving Supplementary Security Income	1.3%	2.9%	1.7%	3.1%	2.0%
	Participating in Medicare	52.5%	85.2%	60.7%	72.8%	15.4%
	Receiving Medicaid or other assistance	4.0%	7.3%	4.8%	9.0%	7.5%

Notes:

- Dollar amounts in this table are adjusted for inflation to 2015 dollars based on the Consumer Price Index for urban areas by the Bureau of Labor Statistics. Amounts in survey responses from 2010 to 2014 were given in current-year dollars.
- Active-duty retirees include likely military retirees who primarily served active duty, rather than retiring from reserve or National Guard units. Our method for identifying likely active-duty military retirees includes every veteran who served an estimated 20 years or longer in the military, received retirement income, and was at least 38 years old when surveyed. Years of military service are estimated as the total of the time spans corresponding to each period during which a veteran reported having served. Retirees, military or not, are defined here as a person who reported receiving any amount of retirement income.
- Census weights indicate how many people in Utah's population each person in the ACS sample represents. Our imperfect method of identifying reserve and guard retirees does not find enough records to approximate the actual proportions of active-duty and reserve/guard retirees according to DoD Actuary's official counts. Nationwide the split is 80.2 percent (active duty) and 19.8 percent (reserve and guard). Based on our analysis of ACS data for Utah and our definition of active-duty retirees (11,115 in ACS divided by 15,984 total from DoD Actuary), the split for Utah is less predominantly active duty at 69.5 percent (active duty) and 30.5 percent (reserve/guard). To incorporate the certainty of the nationwide split and Utah's apparent uniqueness corroborated by staff at the Utah Department of Veterans and Military Affairs, we accept as an assumption the average of the two findings and adjust ACS weights upward for reserve retirees to make the proportions of active-duty retirees and reserve-guard retirees 74.3 percent and 25.7 percent, respectively.
- Reserve retirees include those who served in and retired from reserve or National Guard units, along with any deployments and active duty training or service over the years. Our method for identifying likely military retirees includes every veteran who served an estimated 11 to 20 years active-duty military, reported receiving retirement income, and is at least 60 years old. We presume a significant portion of them fulfilled retirement requirements in reserve or guard units after their active-duty separations. A more precise identification method did not present itself.
- The number of possible Utah military retirees from active duty, reserve units and/or the National Guard according to our analysis of ACS data is 14,844, which is 92.9 percent of the 15,984 individuals from the official DoD Actuary counts for 2010-2014.
- Every difference between all military retirees and non-military retirees, except for three (identified by table note 9), is statistically significant at the 95 percent level of confidence based on appropriate t-tests and chi-square tests and their p values, as well as standard errors and confidence intervals. See Table A4 for standard errors and information on significance tests. Military retirees are not directly identified in the Census Bureau survey. See note 3 for the method of identifying and weighting military retirees in this analysis.
- The adult population includes individuals in Utah age 18 and above and their households.
- Difference not statistically significant, comparing military retirees with non-military retirees
- Household level estimates include any household in the sample with one or more individuals belonging to the specified group. The three groups are military retirees, non-military retirees and everyone age 18 and older. In many cases, multiple individuals belonging to the group live in the same household. If a military retiree and a non-military retiree live in a household, it is counted as a military retiree household.
- The surprising coincidence of median home values for all military retirees and the entire adult population at \$211,401 is based on ACS results.
- Income-to-poverty ratios are top-coded at 501 percent of the poverty threshold, meaning all values above that are recorded as 501 percent. For this reason, mean and medians reported here are somewhat too low.

Source: Kem C. Gardner Policy Institute analysis of U.S. Census Bureau data from the American Community Survey, 2010–2014.

Table A4: Standard Errors for Profile of Military Retirees in Utah (Supplement to Table A3)¹

Topic	Item ²	Active-Duty Retirees	Reserve Retirees	All Military Retirees	Non-Military Retirees ³	Significant ⁴	Test ⁵
Age	Age, mean	0.4283	0.4283	0.4303	0.1305	Yes	T
	Percent age 17 or less	0.00%	0.00%	0.00%	0.02%	Yes	Chi
	Percent age 18 to 34	0.04%	0.04%	0.00%	0.04%	Yes	Chi
	Percent age 35 to 44	0.19%	0.19%	0.17%	0.03%	Yes	Chi
	Percent age 45 to 54	0.33%	0.33%	0.29%	0.05%	Yes	Chi
	Percent age 55 to 64	0.37%	0.37%	0.34%	0.11%	Yes	Chi
	Percent age 65 to 74	0.44%	0.44%	0.40%	0.12%	Yes	Chi
	Percent age 75 to 84	0.42%	0.42%	0.38%	0.12%	No	Chi
	Percent age 85 and above	0.34%	0.34%	0.35%	0.11%	Yes	Chi
Sex	Female and Male (same)	0.14%	0.14%	0.13%	0.13%	Yes	Chi
	Male	0.14%	0.14%	0.13%	0.13%	Yes	Chi
Race and ethnicity	White, non-Hispanic	0.20%	0.20%	0.19%	0.06%	No	Chi
	Hispanic, non-white or 2+ races	0.20%	0.20%	0.19%	0.06%	No	Chi
Place of birth	Utah	0.34%	1.10%	0.33%	0.12%	Yes	Chi
	Ten western states besides Utah	0.32%	0.81%	0.28%	0.09%	No	Chi
	U.S. outside the continental West	0.44%	1.18%	0.39%	0.13%	Yes	Chi
	Outside the U.S.	0.14%	0.00%	0.11%	0.04%	Yes	Chi
Marital status	Married	0.35%	0.35%	0.33%	0.13%	Yes	Chi
	Widowed, divorced or separated	0.32%	0.32%	0.31%	0.12%	Yes	Chi
	Never married	0.02%	0.02%	0.01%	0.05%	Yes	Chi
Household size and children	Number of people living in home	0.0490	0.0490	0.0483	0.0154	Yes	T
	School age (5–17) persons in home	0.0265	0.0265	0.0255	0.0072	Yes	T
	College age (18–29) persons in home	0.0193	0.0193	0.0188	0.0057	No	T
	Percent with 1+ children under 18	0.38%	0.67%	0.31%	0.09%	Yes	Chi
	Percent with 1+ school-age person	0.33%	0.33%	0.29%	0.08%	Yes	Chi
	Percent with 1+ college-age person	0.33%	0.33%	0.29%	0.09%	Yes	Chi
Educational attainment	Less than high school	0.10%	0.10%	0.11%	0.07%	Yes	Chi
	High school or GED, no college	0.29%	0.29%	0.28%	0.11%	Yes	Chi
	Some college	0.44%	0.44%	0.40%	0.12%	Yes	Chi
	Bachelor's degree only	0.35%	0.35%	0.33%	0.10%	Yes	Chi
	Graduate or professional degree	0.37%	0.37%	0.35%	0.09%	Yes	Chi
Employment status	Percent in the labor force	0.44%	0.44%	0.40%	0.11%	Yes	Chi
	Percent employed	–	–	–	–	–	–
	At a for-profit company	0.39%	0.39%	0.36%	0.00%	Yes	Chi
	In government	0.39%	0.39%	0.35%	0.09%	Yes	Chi
	At a non-profit	0.14%	0.14%	0.13%	0.05%	Yes	Chi
	Self-employed	0.22%	0.22%	0.20%	0.05%	Yes	Chi
	Percent unemployed	0.11%	0.11%	0.11%	0.03%	Yes	Chi
	Percent not in the labor force	0.44%	0.44%	0.40%	0.11%	Yes	Chi
Homes	Home owners	0.26%	0.26%	0.23%	0.09%	Yes	Chi
	Renters	0.26%	0.26%	0.23%	0.09%	Yes	Chi
	Other (not owners, no rent)	0.04%	0.04%	0.05%	0.03%	Yes	Chi
	Home value, mean ⁵	\$9,218	\$9,218	\$9,256	\$2,430	Yes	T
Income per adult (age 18+)	Retirement income	\$932	\$932	\$929	\$222	Yes	T
	Non-retirement income	\$1,772	\$1,772	\$1,821	\$367	Yes	T
	Total income	\$2,129	\$2,129	\$2,180	\$445	Yes	T
Household income	Total household income	\$2,574	\$2,574	\$2,610	\$688	Yes	T

Table A4: Continued

Topic	Item ²	Active-Duty Retirees	Reserve Retirees	All Military Retirees	Non-Military Retirees ³	Significant ⁴	Test ⁵
Poverty	Percent below poverty line	0.11%	0.11%	0.11%	0.05%	Yes	Chi
	Income-to-poverty-line ratio	4.30%	4.30%	4.44%	1.40%	Yes	T
Government programs	Receiving Supp. Security Income	0.11%	0.11%	0.11%	0.04%	Yes	Chi
	Participating in Medicare	0.44%	0.44%	0.40%	0.12%	Yes	Chi
	Medicaid or other assistance	0.18%	0.18%	0.18%	0.07%	Yes	Chi

Notes:

- For 95 percent confidence intervals (margins of error) around an estimate in Table A3, simply request the information from the author or multiply the corresponding standard error value from Table A4 by 1.96 and add and subtract the result from the estimate. This will yield upper and lower bounds.
- Compared to Table A3, some item descriptions have been abbreviated here for compactness. All standard errors correspond to means, not medians. Rows without standard errors and t-tests or chi-square tests are omitted.
- Standard errors for Utah's entire adult population are not presented here. Given their much larger number compared to the four retiree subgroups, standard errors for all adults would tend to be smaller than even the standard errors for non-military retirees.
- We test whether each mean or percentage result in Table A3 for all military retirees is significantly different from the result there for non-military retirees at the 95 percent degree of confidence. Yes in the "Significant" column means the difference between military retirees and non-military retirees is statistically significant; No means it is not.
- Significance findings are based on chi-square tests for percentages of the sample. For means, we employ t-tests for independent samples, using pooled or Satterthwaite methods as appropriate given the Folded F measure of equality of variance.

Source: Kem C. Gardner Policy Institute analysis of U.S. Census Bureau data from the American Community Survey, 2010–2014.

Table A5-Part 1: Military Retirees and State Characteristics

State	Number of military retirees in 2005 and 2015 compared to the total population						Active duty and military retirees			Reserves and National Guard		
	Military retirees in 2005	Military retirees in 2015	Military retirees in 2015, percent of 50-state total	Military retirees, percent change from 2005 to 2015	Adult population growth from 2005 to 2015	Military retirees, percent of 2015 adult population	Active duty serving in state, 2014	Active duty per 10,000 adults	Military retirees per active duty	Reserves serving in state, 2014 ¹	Reserves per 10,000 adults	Military retirees per reserve member
Alabama	51,462	60,417	2.9%	17.4%	8.8%	1.6%	7,875	21	7.6	20,829	56	2.9
Alaska	8,877	10,601	0.5%	19.4%	14.6%	1.9%	19,608	357	0.5	4,956	90	2.1
Arizona	52,553	56,239	2.7%	7.0%	20.8%	1.1%	19,792	39	2.8	14,215	28	3.9
Arkansas	24,807	25,817	1.2%	4.1%	8.7%	1.1%	4,998	22	5.2	12,484	55	2.1
California	177,464	160,640	7.7%	-9.5%	13.6%	0.5%	155,051	52	1.0	58,348	20	2.8
Colorado	46,594	52,577	2.5%	12.8%	20.8%	1.3%	37,731	92	1.4	13,469	33	3.8
Connecticut	10,637	10,319	0.5%	-3.0%	6.2%	0.4%	6,139	22	1.7	6,794	24	1.5
Delaware	7,594	8,943	0.4%	17.8%	15.3%	1.2%	3,426	47	2.6	5,260	72	1.7
Florida	187,397	195,523	9.4%	4.3%	16.5%	1.2%	60,095	38	3.2	36,488	23	5.3
Georgia	83,438	96,276	4.6%	15.4%	17.3%	1.2%	69,322	91	1.4	27,340	36	3.5
Hawaii	15,252	17,600	0.8%	15.4%	12.7%	1.6%	49,519	446	0.4	9,377	84	1.9
Idaho	11,775	13,921	0.7%	18.2%	18.2%	1.1%	3,369	28	4.1	5,659	47	2.4
Illinois	33,554	37,078	1.8%	10.5%	5.2%	0.4%	19,797	20	1.9	24,526	25	1.5
Indiana	22,332	26,111	1.3%	16.9%	7.6%	0.5%	815	2	31.4	19885	40	1.3
Iowa	10,797	13,071	0.6%	21.1%	6.6%	0.5%	222	1	57.8	11514	48	1.1
Kansas	19,752	21,980	1.1%	11.3%	7.4%	1.0%	24,886	114	0.9	11,262	52	1.9
Kentucky	24,910	28,694	1.4%	15.2%	7.4%	0.8%	35,901	106	0.8	13,211	39	2.2
Louisiana	25,944	26,682	1.3%	2.8%	4.6%	0.8%	14,953	42	1.8	20,212	57	1.3
Maine	11,731	12,040	0.6%	2.6%	4.5%	1.1%	241	2	49.9	4124	39	2.9
Maryland	48,940	55,046	2.6%	12.5%	10.7%	1.2%	28,100	61	1.9	18,136	39	3.0
Massachusetts	19,365	18,700	0.9%	-3.4%	9.5%	0.3%	1,969	4	9.6	15,977	30	1.2
Michigan	26,542	30,048	1.4%	13.2%	2.6%	0.4%	1,101	1	27.0	15,813	21	1.9
Minnesota	16,249	19,049	0.9%	17.2%	9.5%	0.5%	466	1	40.4	18852	45	1.0
Mississippi	25,623	27,774	1.3%	8.4%	5.6%	1.2%	11,322	50	2.4	16,833	74	1.6
Missouri	34,795	38,415	1.8%	10.4%	7.4%	0.8%	14,179	30	2.7	19,518	42	1.9
Montana	7,827	9,315	0.4%	19.0%	12.3%	1.2%	3,255	41	2.8	4,667	58	2.0
Nebraska	13,009	14,612	0.7%	12.3%	8.6%	1.0%	5,964	42	2.4	6,494	46	2.2
Nevada	27,244	28,983	1.4%	6.4%	22.0%	1.3%	10,902	50	2.6	7,620	35	3.8
New Hampshire	9,336	9,589	0.5%	2.7%	7.6%	0.9%	1,185	11	8.1	4,161	39	2.3
New Jersey	20,672	19,661	0.9%	-4.9%	6.6%	0.3%	6,005	9	3.3	17,396	25	1.1
New Mexico	20,743	21,335	1.0%	2.9%	11.1%	1.3%	12,111	76	1.8	5,126	32	4.2
New York	35,862	39,832	1.9%	11.1%	6.6%	0.3%	22,263	14	1.8	30,257	19	1.3
North Carolina	77,860	94,619	4.5%	21.5%	17.8%	1.2%	100,867	132	0.9	23,230	30	4.0
North Dakota	4,266	5,368	0.3%	25.8%	17.1%	0.9%	6,901	121	0.8	4,598	80	1.1
Ohio	42,191	46,967	2.3%	11.3%	4.0%	0.5%	6,516	7	7.1	28,227	32	1.6
Oklahoma	33,245	36,431	1.7%	9.6%	10.8%	1.2%	19,643	67	1.8	13,914	48	2.6
Oregon	21,224	21,141	1.0%	-0.4%	14.6%	0.7%	408	1	51.5	10135	33	2.1
Pennsylvania	46,556	51,597	2.5%	10.8%	5.4%	0.5%	2,266	2	22.6	31,936	32	1.6
Rhode Island	5,523	5,435	0.3%	-1.6%	2.3%	0.6%	3,316	39	1.6	4,636	55	1.2
South Carolina	51,540	59,441	2.8%	15.3%	17.7%	1.6%	36,670	98	1.6	18,657	50	3.1
South Dakota	6,307	8,268	0.4%	31.1%	11.8%	1.3%	3,233	50	2.5	4,803	75	1.7
Tennessee	46,973	55,321	2.7%	17.8%	12.4%	1.1%	1,987	4	27.5	19,535	39	2.8
Texas	177,713	206,130	9.9%	16.0%	22.9%	1.0%	117,623	59	1.7	53,057	27	3.8
Utah	13,246	16,963	0.8%	28.1%	23.3%	0.8%	3,749	18	4.4	12,039	59	1.4
Vermont	3,456	3,851	0.2%	11.4%	4.9%	0.8%	116	2	32.8	4241	84	0.9
Virginia	137,134	155,789	7.5%	13.6%	13.0%	2.4%	122,884	190	1.3	26,414	41	5.8
Washington	68,732	73,538	3.5%	7.0%	17.4%	1.3%	57,926	106	1.3	19,027	35	3.8
West Virginia	10,233	11,108	0.5%	8.6%	2.4%	0.8%	275	2	40.5	8490	58	1.3
Wisconsin	17,881	21,524	1.0%	20.4%	6.7%	0.5%	534	1	39.9	14993	34	1.4
Wyoming	4,597	5,528	0.3%	20.3%	14.6%	1.2%	2,930	66	1.9	2,971	67	1.8
Total 50 states	1,901,754	2,085,907	100.0%	9.7%	11.6%	0.8%	1,140,406	47	1.8	801,706	33	2.6

Table A5-Part 2: Military Retirees and State Characteristics

State	Veterans and military retirees			Military pensions		Defense spending		Taxes			Economy		Weather	Health care
	Veterans in 2015	Veterans,% of adult population	Military retirees as a percent of veterans	Payments in 2015 (millions) ²	Percent of total personal income	Spending in 2014 (billions) ³	Percent of state GDP	State income tax policy on military pensions as of 2015 ⁴	State individual income tax, 2013 effective tax rate ⁷	State & local taxes, effective tax rate, 2015 ⁸	Unemployment rate, average 2006 to 2015	Cost of living index in 2014 (U.S. = 100)	Average January low temperature, 1981 to 2010	AARP long-term health care rank, 2014
Alabama	411,717	11.0%	14.7%	\$1,486	0.78%	\$11.5	5.9%	Full exemption	1.8%	8.4%	7.3%	87.8	36	49
Alaska	73,276	13.3%	14.5%	\$262	0.63%	\$3.4	5.7%	No state income tax	0.0%	18.0%	7.0%	105.7	11	5
Arizona	528,486	10.2%	10.6%	\$1,425	0.53%	\$11.2	4.0%	Partial exemption	1.4%	9.3%	7.3%	96.4	46	20
Arkansas	247,888	10.9%	10.4%	\$562	0.48%	\$1.4	1.1%	Partial exemption	2.2%	10.0%	6.7%	87.5	32	39
California	1,802,446	6.0%	8.9%	\$4,014	0.19%	\$52.5	2.3%	No exemption	3.9%	11.1%	8.6%	112.4	39	9
Colorado	409,469	9.8%	12.8%	\$1,505	0.55%	\$9.2	3.0%	Partial exemption	2.3%	9.3%	6.1%	102.0	18	4
Connecticut	206,549	7.3%	5.0%	\$224	0.09%	\$9.9	3.9%	Full exemption	3.5%	11.7%	6.9%	108.8	23	11
Delaware	77,354	10.4%	11.6%	\$204	0.45%	\$0.7	1.1%	Partial exemption	3.3%	10.3%	6.1%	101.9	27	28
Florida	1,558,441	9.6%	12.5%	\$5,212	0.58%	\$17.9	2.2%	No state income tax	0.0%	8.2%	7.2%	99.1	39	42
Georgia	752,499	9.8%	12.8%	\$2,327	0.56%	\$12.2	2.6%	Partial exemption	2.4%	8.8%	7.6%	92.0	34	35
Hawaii	120,482	10.7%	14.6%	\$479	0.70%	\$7.6	9.9%	Full exemption	3.0%	12.9%	5.0%	116.8	66	7
Idaho	132,334	10.8%	10.5%	\$327	0.53%	\$0.6	1.0%	Partial exemption	2.4%	8.9%	6.0%	93.4	25	21
Illinois	705,582	7.1%	5.3%	\$842	0.13%	\$5.6	0.8%	Full exemption	2.3%	11.6%	7.7%	100.7	18	14
Indiana	469,210	9.3%	5.6%	\$511	0.19%	\$4.4	1.4%	Partial exemption	2.1%	9.9%	7.2%	91.4	19	46
Iowa	227,991	9.5%	5.7%	\$253	0.18%	\$1.4	0.8%	Full exemption	2.5%	10.2%	4.7%	90.3	14	12
Kansas	218,416	10.0%	10.1%	\$536	0.40%	\$3.5	2.4%	Full exemption	1.7%	10.1%	5.4%	90.7	20	16
Kentucky	328,408	9.6%	8.7%	\$638	0.37%	\$9.0	4.9%	Partial exemption	2.4%	9.8%	7.6%	88.7	21	50
Louisiana	326,229	9.2%	8.2%	\$602	0.30%	\$3.7	1.4%	Full exemption	1.4%	9.3%	6.3%	91.4	45	36
Maine	125,078	11.7%	9.6%	\$262	0.47%	\$2.5	4.4%	Partial exemption	2.9%	12.2%	6.3%	97.1	11	10
Maryland	430,446	9.2%	12.8%	\$1,529	0.45%	\$19.6	5.7%	Partial exemption	2.5%	10.4%	5.8%	110.3	29	22
Massachusetts	367,531	6.8%	5.1%	\$380	0.09%	\$12.1	2.7%	Full exemption	3.6%	10.1%	6.3%	107.1	22	17
Michigan	640,865	8.3%	4.7%	\$571	0.14%	\$3.6	0.8%	Full exemption	2.2%	9.6%	8.9%	94.1	17	30
Minnesota	361,129	8.6%	5.3%	\$362	0.13%	\$3.7	1.2%	Partial exemption	3.8%	11.7%	5.4%	97.6	7	1
Mississippi	218,980	9.7%	12.7%	\$598	0.56%	\$5.5	5.1%	Full exemption	1.7%	10.2%	8.1%	86.7	35	48
Missouri	488,220	10.4%	7.9%	\$827	0.32%	\$11.0	3.9%	Partial exemption ⁵	2.3%	8.6%	6.8%	89.4	21	34
Montana	99,034	12.3%	9.4%	\$214	0.50%	\$0.5	1.1%	Partial exemption	2.8%	9.8%	5.3%	94.2	13	26
Nebraska	141,213	9.9%	10.3%	\$372	0.41%	\$1.4	1.2%	Partial exemption	2.5%	10.1%	3.7%	90.6	12	19
Nevada	225,073	10.1%	12.9%	\$731	0.60%	\$2.1	1.6%	No state income tax	0.0%	9.9%	8.8%	97.7	22	40
New Hampshire	111,389	10.4%	8.6%	\$238	0.33%	\$1.5	2.1%	No state income tax	0.1%	8.3%	4.7%	105.2	10	31
New Jersey	413,188	5.9%	4.8%	\$388	0.07%	\$6.6	1.2%	Full exemption	2.5%	11.4%	7.2%	114.5	24	26
New Mexico	170,132	10.7%	12.5%	\$556	0.69%	\$3.2	3.5%	No exemption	1.8%	10.4%	6.3%	95.0	17	13
New York	862,805	5.5%	4.6%	\$725	0.06%	\$9.6	0.7%	Full exemption	4.2%	15.0%	6.8%	115.7	26	24
North Carolina	773,884	10.0%	12.2%	\$2,406	0.59%	\$10.1	2.1%	Partial exemption	2.9%	9.6%	7.7%	91.7	30	27
North Dakota	57,086	9.8%	9.4%	\$112	0.27%	\$0.8	1.2%	No exemption	1.2%	16.2%	3.2%	91.5	2	32
Ohio	848,124	9.4%	5.5%	\$1,030	0.20%	\$7.2	1.2%	Full exemption	1.8%	10.5%	7.2%	89.3	20	43
Oklahoma	335,905	11.4%	10.8%	\$822	0.47%	\$4.3	2.3%	Partial exemption	1.9%	8.3%	5.0%	90.1	29	44
Oregon	326,338	10.3%	6.5%	\$467	0.27%	\$1.2	0.5%	Partial exemption	4.4%	9.9%	7.8%	99.0	35	3
Pennsylvania	916,638	9.1%	5.6%	\$1,105	0.18%	\$14.2	2.2%	Full exemption	1.9%	10.1%	6.5%	98.2	26	41
Rhode Island	69,862	8.3%	7.8%	\$133	0.25%	\$2.1	3.8%	No exemption	2.3%	11.1%	8.5%	98.7	21	37
South Carolina	417,515	11.0%	14.2%	\$1,441	0.77%	\$6.1	3.3%	Partial exemption ⁶	2.0%	9.0%	8.1%	90.5	34	33
South Dakota	71,736	11.1%	11.5%	\$189	0.49%	\$0.7	1.4%	No state income tax	0.0%	7.8%	3.8%	88.0	0	23
Tennessee	503,675	9.9%	11.0%	\$1,281	0.46%	\$2.4	0.8%	No state income tax	0.1%	7.9%	7.4%	90.2	33	47
Texas	1,675,262	8.3%	12.3%	\$5,324	0.41%	\$39.6	2.5%	No state income tax	0.0%	8.8%	6.0%	96.6	42	29
Utah	150,904	7.2%	11.2%	\$403	0.34%	\$3.3	2.3%	No exemption	2.8%	9.6%	4.8%	97.0	26	38
Vermont	47,664	9.4%	8.1%	\$78	0.26%	\$0.3	1.0%	No exemption	2.4%	12.1%	4.8%	101.2	10	7
Virginia	783,108	12.0%	19.9%	\$5,223	1.19%	\$54.7	11.8%	No exemption	2.8%	8.7%	5.2%	102.6	28	18
Washington	598,460	10.8%	12.3%	\$1,885	0.51%	\$12.7	3.1%	No state income tax	0.0%	9.3%	7.0%	103.8	37	2
West Virginia	165,709	11.3%	6.7%	\$225	0.33%	\$0.5	0.7%	Partial exemption	2.8%	11.1%	6.6%	88.9	26	45
Wisconsin	405,729	9.1%	5.3%	\$418	0.16%	\$3.1	1.0%	Full exemption	2.8%	11.2%	6.3%	93.4	16	8
Wyoming	49,838	11.1%	11.1%	\$127	0.39%	\$0.4	0.9%	No state income tax	0.0%	11.2%	4.6%	96.2	18	15
Total 50 states	21,449,297	8.7%	9.7%	\$51,827	0.34%	\$411.9	2.4%	n/a	2.3%	10.3%	7.0%	100.0	25	n/a

Table A6-Part 1: State Rankings Related to Military Retirement

State	Military retirees in 2005 and 2015 compared to the total population					Active duty and military retirees			Reserves and National Guard			Veterans and military retirees		
	Military retirees in 2005	Military retirees in 2015	Military retirees, percent change from 2005 to 2015	Adult population growth from 2005 to 2015	Military retirees, percent of 2015 adult population	Active duty serving in state, 2014	Active duty per 10,000 adults	Military retirees per active duty	Reserves serving in state, 2014	Reserves per 10,000 adults	Military retirees per reserve member	Veterans in 2015	Veterans, % of adult population	Military retirees as a percent of veterans
Alabama	10	8	13	28	3	24	32	14	11	13	14	20	10	2
Alaska	43	41	8	14	2	18	2	49	42	1	22	45	1	4
Arizona	8	10	36	5	24	16	26	22	25	42	5	13	20	22
Arkansas	25	26	40	29	21	30	30	16	29	14	24	29	11	24
California	3	3	50	17	39	1	17	44	1	49	16	1	48	30
Colorado	13	13	23	4	10	9	10	40	27	35	6	21	28	7
Connecticut	40	42	47	40	47	27	31	37	37	46	36	34	44	47
Delaware	45	45	12	13	17	32	21	25	40	7	32	44	17	16
Florida	1	2	39	12	16	6	27	20	3	47	2	3	30	11
Georgia	5	5	18	10	11	5	11	41	7	31	10	9	27	8
Hawaii	34	34	17	19	4	8	1	50	34	2	29	41	14	3
Idaho	37	37	10	6	20	33	29	18	39	20	18	39	12	23
Illinois	18	18	31	43	46	15	33	30	9	45	37	10	46	45
Indiana	26	25	15	32	41	43	45	8	13	25	43	16	35	41
Iowa	39	38	5	37	38	49	50	1	31	18	48	30	32	39
Kansas	30	27	28	34	27	13	6	46	32	16	27	33	23	26
Kentucky	24	22	20	35	30	11	8	47	28	28	21	26	31	31
Louisiana	22	24	42	45	35	19	22	34	12	12	42	28	37	33
Maine	38	39	44	46	22	48	42	3	49	30	13	40	4	27
Maryland	11	12	24	25	18	12	15	29	19	27	12	17	36	9
Massachusetts	31	33	48	27	48	40	40	12	22	41	44	23	47	46
Michigan	21	20	22	48	45	42	46	10	23	48	28	11	41	49
Minnesota	33	32	14	26	44	45	49	5	17	22	49	24	40	44
Mississippi	23	23	35	41	14	22	20	28	21	6	34	32	29	10
Missouri	17	17	32	33	31	20	28	23	15	23	26	15	18	35
Montana	44	44	9	21	19	35	24	21	44	10	25	43	2	28
Nebraska	36	36	25	30	25	29	23	27	38	21	20	38	24	25
Nevada	20	21	38	3	8	23	19	24	36	32	9	31	21	6
New Hampshire	42	43	43	31	29	41	36	13	48	26	19	42	16	32
New Jersey	29	31	49	39	49	28	37	19	20	44	47	19	49	48
New Mexico	28	29	41	23	6	21	12	35	41	37	3	35	15	12
New York	16	16	29	38	50	14	35	33	5	50	41	5	50	50
North Carolina	6	6	4	7	15	4	4	45	10	40	4	8	22	15
North Dakota	49	49	3	11	28	25	5	48	46	4	46	48	26	29
Ohio	15	15	27	47	40	26	38	15	6	39	33	6	33	42
Oklahoma	19	19	33	24	13	17	13	32	26	19	17	25	5	21
Oregon	27	30	45	16	36	46	47	2	33	36	23	27	19	38
Pennsylvania	14	14	30	42	42	38	43	11	4	38	35	4	38	40
Rhode Island	47	48	46	50	37	34	25	38	45	15	45	47	43	36
South Carolina	9	9	19	8	5	10	9	39	18	17	11	18	9	5
South Dakota	46	46	1	22	9	36	18	26	43	5	31	46	8	17
Tennessee	12	11	11	20	23	39	39	9	14	29	15	14	25	20
Texas	2	1	16	2	26	3	16	36	2	43	8	2	42	13
Utah	35	35	2	1	32	31	34	17	30	9	39	37	45	18
Vermont	50	50	26	44	33	50	41	7	47	3	50	50	34	34
Virginia	4	4	21	18	1	2	3	42	8	24	1	7	3	1
Washington	7	7	37	9	7	7	7	43	16	33	7	12	13	14
West Virginia	41	40	34	49	34	47	44	4	35	11	40	36	6	37
Wisconsin	32	28	6	36	43	44	48	6	24	34	38	22	39	43
Wyoming	48	47	7	15	12	37	14	31	50	8	30	49	7	19

Note: Rankings are based on values from Table A5, Military Retirees and State Characteristics. Except where noted in the “economy” and “taxes” sections, higher rankings (1, 2, 3...) represent larger values for a given measure, and lower rankings (...48, 49, 50) correspond to smaller values. As for the exceptions, higher rankings correspond to lower unemployment rates, cost of living, and tax rates. Information for the District of Columbia was not available for all rankings, and it is not included in this table.

Table A6-Part 2: State Rankings Related to Military Retirement

State	Military pensions		Defense spending		Taxes (rank 1 = low tax rate, 50 = high tax rate)			Economy		Weather	Health care
	Payments in 2015	Percent of total personal income	Spending in 2014	Percent of state GDP	State income tax policy on military pensions as of 2015 ⁴	State individual income tax, 2013 effective tax rate	State & local taxes, effective tax rate, 2015	Unemployment rate, 2006-2015 avg. (lowest = 1)	Cost of living index in 2014 (lowest = 1)	Average January low temperature, 1981 to 2010	AARP long-term health care, 2014
Alabama	10	2	10	3	Full exemption	17	6	37	3	8	49
Alaska	38	6	30	4	No state income tax	7	50	31	43	44	5
Arizona	12	13	11	9	Partial exemption	12	15	38	26	2	20
Arkansas	25	18	41	39	Partial exemption	23	25	27	2	14	39
California	4	39	2	21	No exemption	48	36	48	47	5	9
Colorado	9	12	16	16	Partial exemption	27	13	19	39	35	4
Connecticut	43	47	14	10	Full exemption	45	43	30	45	26	11
Delaware	45	23	44	38	Partial exemption	44	32	18	38	19	28
Florida	3	9	5	25	No state income tax	7	3	36	35	5	42
Georgia	6	11	8	18	Partial exemption	29	10	41	19	11	35
Hawaii	29	4	18	2	Full exemption	43	47	9	50	1	7
Idaho	37	14	46	41	Partial exemption	31	11	17	21	24	21
Illinois	16	45	22	47	Full exemption	24	42	43	36	35	14
Indiana	28	40	24	31	Partial exemption	21	23	34	16	34	46
Iowa	40	41	39	45	Full exemption	34	30	6	11	41	12
Kansas	27	26	29	20	Full exemption	14	27	13	14	32	16
Kentucky	21	28	17	7	Partial exemption	28	20	40	5	29	50
Louisiana	22	33	27	29	Full exemption	11	14	20	16	3	36
Maine	39	20	34	8	Partial exemption	42	46	23	29	44	10
Maryland	8	22	4	5	Partial exemption	33	33	15	46	16	22
Massachusetts	34	48	9	17	Full exemption	46	29	21	44	27	17
Michigan	24	44	28	44	Full exemption	22	18	50	22	38	30
Minnesota	36	46	26	36	Partial exemption	47	44	14	30	48	1
Mississippi	23	10	23	6	Full exemption	13	31	45	1	9	48
Missouri	17	32	12	11	Partial exemption ⁵	25	7	29	8	29	34
Montana	44	16	48	37	Partial exemption	39	21	12	23	42	26
Nebraska	35	25	40	34	Partial exemption	32	28	2	13	43	19
Nevada	19	7	36	28	No state income tax	7	22	49	31	27	40
New Hampshire	41	31	38	26	No state income tax	9	4	5	42	46	31
New Jersey	33	49	20	35	Full exemption	35	41	34	48	25	26
New Mexico	26	5	32	13	No exemption	15	34	23	24	38	13
New York	20	50	15	48	Full exemption	49	48	28	49	20	24
North Carolina	5	8	13	27	Partial exemption	41	17	42	18	15	27
North Dakota	49	34	43	33	No exemption	10	49	1	17	49	32
Ohio	15	38	19	32	Full exemption	16	35	35	7	32	43
Oklahoma	18	19	25	23	Partial exemption	18	5	10	9	16	44
Oregon	30	35	42	50	Partial exemption	50	24	44	34	9	3
Pennsylvania	14	42	6	24	Full exemption	19	26	25	32	20	41
Rhode Island	47	37	37	12	No exemption	26	38	47	33	29	37
South Carolina	11	3	21	14	Partial exemption ⁶	20	12	46	12	11	33
South Dakota	46	17	45	30	No state income tax	7	1	3	4	50	23
Tennessee	13	21	35	46	No state income tax	8	2	39	10	13	47
Texas	1	24	3	19	No state income tax	7	9	16	27	4	29
Utah	32	29	31	22	No exemption	38	19	8	28	20	38
Vermont	50	36	50	42	No exemption	30	45	7	37	46	7
Virginia	2	1	1	1	No exemption	37	8	11	40	18	18
Washington	7	15	7	15	No state income tax	7	16	32	41	7	2
West Virginia	42	30	47	49	Partial exemption	40	37	26	6	20	45
Wisconsin	31	43	33	40	Full exemption	36	40	24	21	40	8
Wyoming	48	27	49	43	No state income tax	7	39	4	25	35	15

Note: Rankings are based on values from Table A5, Military Retirees and State Characteristics. Except where noted in the “economy” and “taxes” sections, higher rankings (1, 2, 3...) represent larger values for a given measure, and lower rankings (...48, 49, 50) correspond to smaller values. As for the exceptions, higher rankings correspond to lower unemployment rates, cost of living, and tax rates. Information for the District of Columbia was not available for all rankings, and it is not included in this table.

Notes for Tables A5 and A6:

Table A6 provides state rankings based on the values in Table A5.

1. Reserves here are Selected Reserve members attached to National Guard or Reserve units corresponding to any branch of the military. Reserve members have part-time ongoing commitments as part of the Armed Forces' readiness effort. They gain active-duty status during periods of deployment.
2. Total annual payments to military pension recipients in Utah do not include survivor pensions, which were 7% of military retiree pensions in 2014.
3. Defense spending includes payroll spending for active duty, reserve, guard and civilian employees, as well as contract spending by the Department of Defense in each state during fiscal year 2014, the most recent year readily available.
4. State income tax policies for military pensions represent the 2015 tax year.
5. In 2016, Missouri's partial (90%) exemption will be raised to 100% for a full exemption.
6. From 2016 to 2018, South Carolina will phase in a full exemption.
7. Effective state income tax rates are calculated as total revenue from state individual income taxes divided by total annual personal income in the state. This is a general measure for all taxpayers in the state, not specifically for military retirees who may receive exemptions or deduction on their military pensions or on the basis of their age or income.
8. Effective state & local tax rates reflect statewide averages for all taxpayers, calculated as total state and local tax revenue divided by total annual personal income in the state. The revenue measure includes sales and gross receipts taxes, state individual and corporate income taxes, property taxes, motor fuel taxes, and a great variety of other taxes.

Sources for Tables A5 and A6:

Military retiree counts and pensions - DoD Actuary, 2015 Statistical Report on the Military Retirement System

State population totals - U.S. Census Bureau, intercensal estimates for 2005, annual estimates for 2015

Active duty and reserve counts - U.S. Department of Defense, 2014 Demographics: Profile of the Military Community

Veteran counts - U.S. Department of Veteran Affairs, Office of the Actuary, VetPop 2014

Defense spending - U.S. Department of Defense, Defense Spending by State: Fiscal Year 2014

State income tax policy on military pensions - Military Officers Association of America, State-by-State Assessment

State and local taxes - U.S. Census Bureau, Quarterly Summary of State and Local Taxes

Personal income for effective tax rates - U.S. Department of Commerce, Bureau of Economic Analysis

Unemployment rates - U.S. Department of Labor, Bureau of Labor Statistics

Cost of living index - U.S. Department of Commerce, Bureau of Economic Analysis, Regional Price Parity

Average temperature in January - US Climate Data at usclimatedata.com

Health care rankings - AARP Public Policy Institute, Long-Term Services and Supports Scorecard

Endnotes

- 1 The range of 3.9 percent to 4.5 percent for the fiscal note's state income tax rate is obtained by trying the calculation several ways: using both \$387.8 million and \$414.9 million from 2014, and trying the actual 2015 pension amounts released since the fiscal note was issued, with and without inflation adjustments assuming 2014 to 2015 inflation as measured by the BLS CPI West B/C continues through 2017.
- 2 Further research could address that issue. In particular, long-term projections would be needed for military retiree migration into Utah net of ongoing migration from Utah to other states, as well as military retiree deaths and new retirements of military retirees in Utah. Exemption migration response scenarios could be explored for selected time spans.
- 3 Individuals receiving early retirement for medical or other reasons may retire before reaching the equivalent of 20 years of active duty service.
- 4 The U.S. Department of Veterans Affairs estimates 150,904 veterans lived in Utah as of September 2015.
- 5 Five years of data are included in this analysis, rather than just the most recent year available, 2014 at the time of publication, in order to provide a large enough sample of Utah veterans to find statistically significant results.
- 6 In the analysis for this section, "likely military retirees" are all ACS respondents who are veterans, who receive retirement income, who are old enough to have had time to qualify for military retirement, and who served an estimated 20 years or the equivalent in the U.S. Armed Forces. This group may include retired veterans who are not military retirees because the ACS question addressing years of service identifies all wars and interwar periods during which a person served, without giving the exact years of service.
- 7 In 2015, Utah military retirees received an average of \$23,739 in military pension payments. We divide \$402.7 million in military pension payments by the 16,963 military retirees in the state (see the first note to Table 1 and the totals row in Table 9, respectively). We estimate average total income per military retiree as \$70,560 in 2015 dollars, based on U.S. Census data from 2010 to 2014 (see Appendix Table A3). The 34 percent result for military pensions as a share of total income equals \$23,739 divided by \$70,560.
- 8 The ruling does not preclude military pensions from receiving more favorable tax treatment than state pensions.
- 9 The 10 percent estimate is based on Utah's effective state income tax rate of 2.8 percent, divided by its 9.6 percent overall effective tax rate for state and local taxes, which equals 29 percent (see the "Taxes" section of Appendix Table A5). We multiply 29 percent by 34 percent, the share of a Utah military retiree's income in 2015 that came from military pensions (see Section 4.1). A change in the state income tax exemption would not affect tax obligations on the remaining 66 percent of military retiree income from wages, investments and other sources.
10. Median income reflects an area's economic opportunity and prosperity.
- 11 Federal employment shares are findings of the analysis in Section 3.3 that were not reported there or in Appendix Table A3.
- 12 For the same ten-year period Utah's entire population, including those under age 18, grew 28 percent, compared with 9 percent nationwide. In 2015, Utah had the 31st largest total population and the 35th largest adult population among the states.
- 13 This finding accounts for major state government revenues and expenses associated with this group. Including local governments significantly lowers the bar in terms of the minimum migration response needed for fiscal neutrality. In that case, Utah's military retiree population would need to increase by more than 50 percent.



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