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Regional Economic Analysis Laboratory

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## THE PROJECTED ECONOMIC & FISCAL IMPACT OF EXEMPTING MILITARY PENSION INCOME FROM SOUTH CAROLINA INCOME TAX

ASSUMING FULL EXEMPTION IMPLEMENTED  
FOLLOWING SUNSET OF ACT 272

Robert T. Carey, Ph.D.

Director, Regional Economic Analysis Laboratory  
carey2@clemson.edu

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Regional Economic Analysis Laboratory  
2035 Barre Hall  
Clemson University  
Clemson, SC 29634

Phone: 864-656-0372  
<http://cu-real.com>

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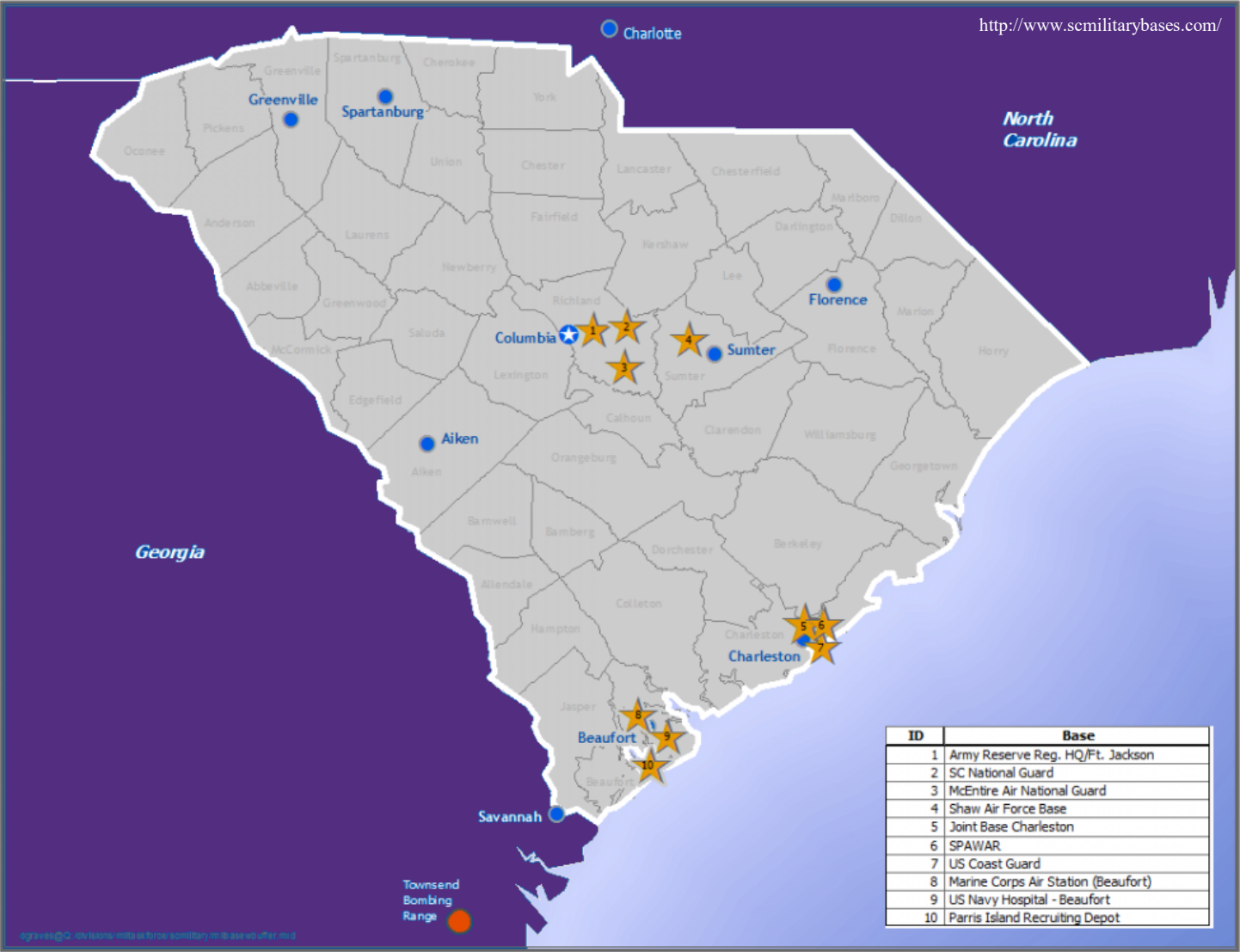
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| 2  | SC National Guard                   |
| 3  | McEntire Air National Guard         |
| 4  | Shaw Air Force Base                 |
| 5  | Joint Base Charleston               |
| 6  | SPAWAR                              |
| 7  | US Coast Guard                      |
| 8  | Marine Corps Air Station (Beaufort) |
| 9  | US Navy Hospital - Beaufort         |
| 10 | Parris Island Recruiting Depot      |

## Executive Summary

This study examines the impact that exempting military pension income from South Carolina income tax would have on the state's economy as well as state and local net government revenues. The model uses dynamic scoring, that is, it accounts for the impact from economic changes predicted to result from the change in tax policy feeding back into state and local government revenue. This report assumes the implementation of a full exemption following the 2020 sunset of SC Act 272 of 2016.

Economic impacts are estimated using the Regional Economic Models, Inc. (REMI) PI<sup>+</sup> modeling engine. Economic effects predicted by REMI are input to our Fiscal Impact Analysis Tool; these results are then cycled back through the REMI model in two additional iterations in order to increase the precision of the estimated impacts. The model assumes that the cost of the tax exemption must be offset by a reduction in the state government budget (i.e. state government "output") by the amount of foregone revenue. The tax exemption is assumed to go into effect for tax year (TY) 2021.

It is expected that the increase in RMSP disposable income resulting from the tax policy will result in at the least no net change and at best a net increase in retired military service personnel (RMSP) locating to the state; however, the size of the RMSP migration response is difficult to predict, given the number of factors that influence RMSP location decisions over and above the standard determinants of economic migration. This study therefore estimates four separate models: one assuming zero net RMSP migration (i.e., the state simply retains current and projected RMSP); the remaining three models assume increases in RMSP migration of one, 2.5, and five percent (spread out over the years 2021-2025), respectively. A summary of findings follows.

*General Findings (see text of report for citations):*

- 1) As of 2017, there were 53,882 retired military service personnel (RMSP) residing in SC. Approximately 45 percent of RMSP in SC were under 65 years of age in 2017; the under-65 RMSP population shows a historical trend of declining at approximately 1.5 percent per year since 2013, while RMSP population over 65 has grown around 2.7 percent per year.
- 2) Median income for military veterans, which is inclusive of RMSP, is greater than the general population: \$36,821 per year as opposed to \$25,045.

*Model Results:*

- 3) The tax exemption on military pensions has a positive overall economic impact on the state with the exception of the zero RMSP migration model, due to the assumed offsetting cuts in the state budget and associated cuts in government employment that the model assumes to accompany these cuts. The size of the impact on the state economy is naturally dependent on the number of RMSP who migrate to the state as a result of the exemption: the more RMSP migrate to the state, the more positive the economic impact.
- 4) Local governments are projected to see positive net revenue impacts overall in all three models. In the positive RMSP migration models, the net fiscal impact is negative in the first year due to the initial assumed population influx placing new demands on local governments; in the outlying years, increased revenue from economic activity outpaces the increase in demand on local government services, albeit in varying degrees from one year to the next.
- 5) In the models predicting 2.5 and five percent RMSP migration, state government net revenues are projected to see positive net revenue effects after the first year; this is due to the assumed influx of RMSP and

their higher incomes, which generates additional revenue through income and sales taxes and other spillover from increased economic activity.

- 6) In the zero and one percent RMSP migration models, the net impact on state revenue is predicted to remain negative through 2025, albeit by less than the amount of the tax cut. The economic feedback effects offset more of the cost of the exemption in the outlying years.

## I. Introduction

The following is an assessment of the impact that the proposed exemption of military pension income from South Carolina income taxes would have on the state's economy as well as net state and local government revenue. The full exemption is assumed to go into effect in tax year (TY) 2021, following the 2020 sunset of Act 272 (2016).

## II. Methodology and Assumptions

To estimate the economic impact of the proposed tax policy, the Regional Economic Analysis Laboratory utilized the Regional Economic Models, Inc. (REMI) PI<sup>+</sup> modeling engine along with the Laboratory's own Fiscal Impact Analysis Tool. REMI utilizes input-output (IO) modeling as well as computable general equilibrium (CGE) and econometric modeling to project a baseline of economic activity assuming *ceteris paribus* except for normal economic growth. Shocks to the economy can then be modeled in terms of departures from that baseline, including direct, indirect, and induced effects.

The REMI model is a new economic geography (NEG) model, taking into account trade flows between regions based upon availability of labor and natural resources and the efficacy of transporting goods and services to and from the region. The model can project economic impacts over multiple years; it is currently capable of projecting impacts into the future as far as 2060. For this study the model was run through 2025.

Outputs from the REMI model are used with the Fiscal Impact Analysis Tool in order to project the net fiscal impact that the modeled economic shocks will have on local (county and municipal) and state government. The fiscal tool uses U.S. Census of Governments data to estimate changes in revenue and expenditures for state and local governments based upon changes in correlated metrics generated by the REMI model. Net fiscal impact is defined as the total revenue impact minus the total impact on expenditures.

Because South Carolina state government must balance its budget under the law, any projected decrease in state government revenues are cycled back through the REMI model as a cut in state government

output. This captures the change in state government jobs resulting from any cut in state spending. Two additional iterations of the model (for a total of three) are run in order to capture this effect more fully. This creates a dynamic scoring model that includes economic feedback effects on state and local government revenue as opposed to a static scoring model that considers the impact on tax revenues independent of any economic feedback effects.

Model results are presented in the following sections. Note that all dollar amounts are stated in nominal (current) dollars, assuming an approximately two percent annual cost of living adjustment to pension income.

All impacts are reported using the following metrics:

- *Employment* is the number of jobs or job equivalents created as a result of the proposed tax decrease through direct, indirect, and induced effects. Employment is reported in this study as private non-farm employment as well as total employment, which includes the impact on public-sector jobs.
- *Total compensation* is the impact on aggregated wage income (including fringes) for all workers in the state.
- *Disposable income* is the aggregated household income, less taxes, of all households within the state. Disposable income is primarily wage-driven, but also includes income from transfer payments, dividends, interest, and rent.
- *State gross domestic product (GDP)*, is the dollar value of all new, final goods and services produced within the state.
- *Output* is the dollar value of all goods and services produced within the state within a given year. This is somewhat broader than GDP, as it includes intermediate goods which are excluded from GDP.
- *Net local government revenue* is the revenue collected by local (county and municipal) governments from all sources, including taxes, licensing, fees, and intergovernmental

transfer, less expenses.

- *Net state government revenue* is revenue collected by state government from all sources, less expenses.

### III. Model Inputs

The model hinges primarily on two factors: the amount of the decrease in the tax bill realized by retired military service personnel (RMSP), ergo, the increase in individual disposable income, and the size of the migration response among RMSP associated with the opportunity for this increase in disposable income.

Migration response here refers to economic migration, or migration to South Carolina from other states due to economic factors such as lower cost of living, job opportunity and higher relative wages. Military retirees are assumed to migrate to the state as a result of the effective decrease in relative cost of living associated with the decrease in tax burden. However, the precise amount by which economic migration would be impacted is difficult to determine. This is because, in addition to the factors typically influencing economic migration, the decision by RMSP to locate to a particular state is dependent upon a number of exogenous factors, including the location of the military installation of their last assignment.<sup>1</sup>

RMSP population projections are based off of the most recent (2017) RMSP population estimate for the state; annual growth (or decline) in RMSP is projected using historic growth rates.<sup>2</sup>

RMSP migration response to the tax exemption is modeled at four rates: a zero percent increase in the projected RMSP population (i.e. the state simply retains the projected population rather than possibly losing them to other states that, for example, offer similar exemptions for military pension income), and a one, 2.5, and five percent increase in RMSP population. These growth rates were spread over the years 2021-2025; for example, in the 2.5 percent migration scenario, the annual rate of additional migration was 0.5 percent over five years. Projected baseline RMSP population for the state and the RMSP population projected under each of these migration rates are shown in the Appendix. Separate models were run for each of these migration scenarios.

As of September 2017, South Carolina was home to 53,882 RMSP; of the RMSP residing in the state in 2017, approximately 45 percent are under 65 years of age.<sup>3</sup>

Military veterans in South Carolina have higher median personal incomes than the general population: \$36,821 per year as opposed to \$25,045.<sup>4</sup> RMSP income is assumed to be comparable to the number reported for veterans in general, if not somewhat greater. Therefore, in the interest of providing a reasonably conservative estimate of the impact that RMSP migration would have on the state, the gap between veteran median income and that of the general population is applied to RMSP migrants in the model.

Additionally, family members are assumed to accompany RMSP in their move to the state. Average household size for South Carolina was 2.55 persons in 2016<sup>5</sup>; this number was applied to RMSP migrants under 65 years of age. For RMSP over 65, 1.9 persons per household was assumed.<sup>6</sup> The number of assumed migrants under each positive RMSP migration scenario were multiplied by these assumed number of persons per household and entered into the model. However, the income adjustment described in the previous paragraph was only applied to the individual RMSP, not to the other members of their household.

Three iterations of a total of three models were run in order to estimate the net economic and fiscal impact of the proposed exemption of military pension income from South Carolina income tax.

The model assumes that, in order to balance its budget, the state government must reduce expenditures in other areas to cover the cost of the tax exemption. The model takes the impact on local government budgets into account vis-à-vis their effect on local

1. Cf. New Mexico State University. (2009). *The Economic Impact of Exempting Retired Military Service Personnel from New Mexico Personal Income Tax*, (p.9): <http://arrowheadcenter.nmsu.edu/sites/default/files/uploaded/rmsp.pdf>.
2. Defense Manpower Data Center, Office of the Actuary, U.S. Dept. of Defense, 2017
3. Ibid.
4. U.S. Census American Community Survey (ACS), 2012-2016.
5. Ibid.
6. Households of RMSP over 65 were assumed to have no dependent children, making household size two persons. 2016 Census ACS data for 2016 report that ten percent of individuals over 65 in South Carolina reside alone, reducing average household size to 1.9.



economies. Both state and local governments are assumed to spend any excess revenue generated.

While the tax benefit accrues to affected RMSP according to tax (calendar) year, the impact on the state budget occurs according to the state’s fiscal year. For example, in the first year, RMSP DOD retirement income is exempted for TY 2021, but the impact on the state budget occurs in FY 2022 (i.e. July 2021-June 2022). However, to simplify the modeling process and to err somewhat on the side of conservatism, both the effect from the tax exemption on RMSP disposable income and the offsetting reduction in the state budget are modeled as occurring concurrently.

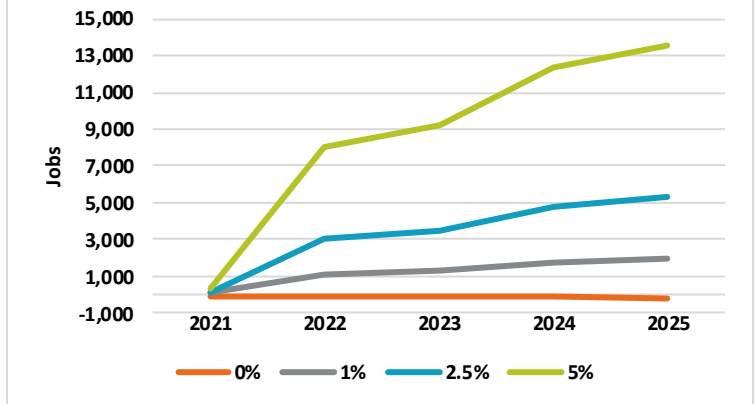
#### IV. Findings

*Caution:* The numbers presented in the following represent change from the projected baseline (status quo) levels of employment, output, revenue and so forth; they do not represent the absolute levels for any of these indicators. Furthermore, the number of jobs (or dollars) represented in this study are small relative to the overall state economy. As such, negative numbers simply indicate less growth from one year to the next relative to the projected baseline; positive values represent an increase in growth over and above the status quo.

##### A. Zero Percent Migration

This model assumes zero additional RMSP population growth resulting from the tax policy. It further assumes that foregone income tax revenue due to the policy must be reallocated from elsewhere in the state budget. Results estimated by this model are presented in the Appendix. Estimated employment impacts for all three models are presented graphically in Figure 1. The employment impact in the zero migration model is negative by about 100 jobs between 2021-2025. The negative employment impacts seen here are largely due to the assumed cutting of state and local government jobs as a result of the assumed offsetting budget decrease; these government employment cuts however can be interpreted as being slightly pessimistic because government expenditures can be trimmed to some degree without reductions in manpower.

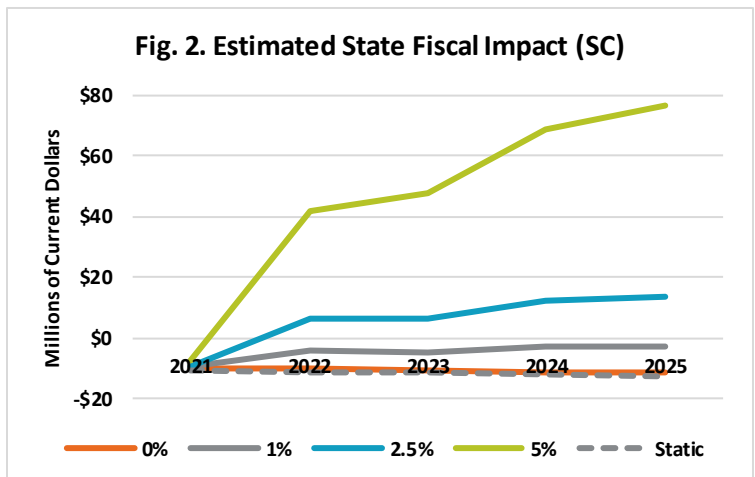
Fig. 1. Estimated Employment Impact (SC)

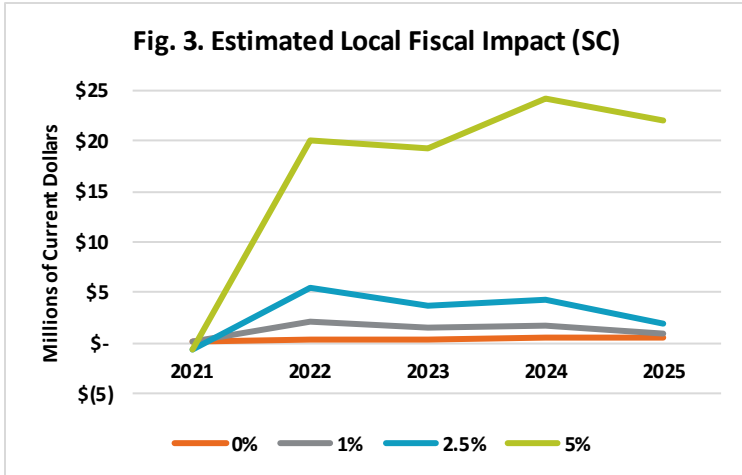


The model predicts that “feedback” from the economic activity stimulated by the tax reduction will generate state government revenue partially offsetting the decrease in revenues. A net negative impact is predicted on state revenues that persists in the zero migration model for the entirety of the study period; this negative net revenue impact, however, is smaller than that predicted by a static scoring analysis (static revenue impact is shown in the Appendix for purposes of comparison); the offsetting effect becomes somewhat larger over time, although the net revenue effect becomes more negative (i.e., while the offsetting effect becomes more positive, the increase in lost tax revenue becomes larger slightly faster). Projected net fiscal impact for state government is presented for all three models in Figure 2.

The net fiscal impact on local governments for the zero RMSP migration model is predicted to be positive given the negligible projected impact on population and therefore the relatively small impact on demand for local government services.

Fig. 2. Estimated State Fiscal Impact (SC)





### B. Positive RMSP Migration Models

Because these models assume some in-migration of RMSP (and their incomes), resulting from the tax policy, economic impacts are much more positive than in the zero RMSP migration model, as shown in the Appendix. As additional RMSP are assumed to migrate into the state, economic feedback generates greater offsetting effects on net state revenues, resulting in positive projected net revenue impacts after the first year in the 2.5 and five percent migration models; the greater the assumed RMSP migration response, the more positive the impact on state revenues.

The impact on local government revenue is net positive, except for the first year in the 2.5 and five percent migration models, due to increased demand for local government services associated with the larger initial population changes. Beyond this point, predicted economic growth creates more revenue than the cost created through in-migration and the net local fiscal impact, despite some year-to-year fluctuation, becomes positive. Local government revenue impacts are shown in Figure 3.

## V. Conclusion

The models constructed for this study indicate that the magnitude of the net impact of exempting military pension income from South Carolina income tax hinges to a substantial degree upon the migration response of RMSP to the policy. Unfortunately, this migration response depends on a number of factors beyond those that influence economic migration in general, making a precise prediction difficult. As such, this study modeled four RMSP migration response rates, ranging from zero to five percent, with the expectation that the actual response would fall somewhere within this range.

In the zero RMSP migration model, the predicted economic impact was negative following implementation. In the models with a positive RMSP migration response, the predicted economic impacts are positive in each year.

The impact on net state government revenues is predicted to be negative in the zero and one percent migration models with economic feedback effects offsetting the cost of the tax exemption to some degree. In the 2.5 and five percent RMSP migration models, net state revenue impact is predicted to be positive after the first year, the magnitude depending upon the size of the RMSP migration response.

With the exception of the zero and one percent RMSP migration models, local governments see negative net revenue impacts in the initial year of the policy due to the assumed migration response, which entails an increase in demand for local government services. However, in the following years, net revenue impacts for local governments are predicted to be positive.

Table A-1. RMSP Population (not including households)

| Projected Baseline        | 2021          | 2022          | 2023          | 2024          | 2025          |
|---------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Under 65</b>           | 22,768        | 22,422        | 22,084        | 21,754        | 21,432        |
| <b>65 and above</b>       | 33,369        | 34,390        | 35,450        | 36,550        | 37,692        |
| <b>Total</b>              | <b>56,137</b> | <b>56,812</b> | <b>57,534</b> | <b>58,304</b> | <b>59,124</b> |
| <b>1 Percent Growth</b>   |               |               |               |               |               |
| <b>Under 65</b>           | 22,815        | 22,514        | 22,221        | 21,935        | 21,657        |
| <b>65 and above</b>       | 33,433        | 34,521        | 35,650        | 36,822        | 38,037        |
| <b>Total</b>              | <b>56,248</b> | <b>57,035</b> | <b>57,871</b> | <b>58,757</b> | <b>59,694</b> |
| <b>2.5 Percent Growth</b> |               |               |               |               |               |
| <b>Under 65</b>           | 22,884        | 22,652        | 22,427        | 22,209        | 21,998        |
| <b>65 and above</b>       | 33,531        | 34,719        | 35,953        | 37,233        | 38,561        |
| <b>Total</b>              | <b>56,414</b> | <b>57,371</b> | <b>58,380</b> | <b>59,442</b> | <b>60,559</b> |
| <b>5 Percent Growth</b>   |               |               |               |               |               |
| <b>Under 65</b>           | 23,000        | 22,883        | 22,774        | 22,672        | 22,576        |
| <b>65 and above</b>       | 33,692        | 35,051        | 36,461        | 37,925        | 39,447        |
| <b>Total</b>              | <b>56,692</b> | <b>57,934</b> | <b>59,235</b> | <b>60,597</b> | <b>62,023</b> |

Table A-2. Projected Static Revenue Impact

|                                     | 2021        | 2022        | 2023        | 2024        | 2025        |
|-------------------------------------|-------------|-------------|-------------|-------------|-------------|
| <b>Thousands of Nominal Dollars</b> | \$ (10,620) | \$ (11,194) | \$ (11,782) | \$ (12,384) | \$ (13,002) |

**Table A-3. Projected Economic and Fiscal Impact of Additional Tax Deduction (0% Economic Migration)**

|                              | 2021                         | 2022        | 2023        | 2024        | 2025        |             |
|------------------------------|------------------------------|-------------|-------------|-------------|-------------|-------------|
| Total Employment             | Individuals (Jobs)           | (112)       | (107)       | (109)       | (112)       | (116)       |
| Total Compensation           | Thousands of Nominal Dollars | \$ (7,898)  | \$ (7,826)  | \$ (8,198)  | \$ (8,599)  | \$ (8,989)  |
| Disposable Personal Income   | Thousands of Nominal Dollars | \$ 4,722    | \$ 5,389    | \$ 5,554    | \$ 5,716    | \$ 5,907    |
| Gross Domestic Product       | Thousands of Nominal Dollars | \$ (8,513)  | \$ (8,185)  | \$ (8,339)  | \$ (8,646)  | \$ (9,027)  |
| Output                       | Thousands of Nominal Dollars | \$ (13,686) | \$ (13,140) | \$ (13,405) | \$ (13,935) | \$ (14,579) |
| Net State Government Revenue | Thousands of Nominal Dollars | \$ (10,095) | \$ (10,467) | \$ (10,900) | \$ (11,341) | \$ (11,784) |
| Net Local Government Revenue | Thousands of Nominal Dollars | \$ 186      | \$ 304      | \$ 390      | \$ 462      | \$ 526      |

**Table A-4. Projected Economic and Fiscal Impact of Additional Tax Deduction (1% Economic Migration)**

|                              | 2021                         | 2022       | 2023       | 2024       | 2025       |            |
|------------------------------|------------------------------|------------|------------|------------|------------|------------|
| Total Employment             | Individuals (Jobs)           | 172        | 1,150      | 1,341      | 1,790      | 1,982      |
| Total Compensation           | Thousands of Nominal Dollars | \$ 7,430   | \$ 57,894  | \$ 61,093  | \$ 83,383  | \$ 90,175  |
| Disposable Personal Income   | Thousands of Nominal Dollars | \$ 24,971  | \$ 107,616 | \$ 127,148 | \$ 177,231 | \$ 210,914 |
| Gross Domestic Product       | Thousands of Nominal Dollars | \$ 13,152  | \$ 111,530 | \$ 130,475 | \$ 175,811 | \$ 192,726 |
| Output                       | Thousands of Nominal Dollars | \$ 21,663  | \$ 179,166 | \$ 210,401 | \$ 283,433 | \$ 311,764 |
| Net State Government Revenue | Thousands of Nominal Dollars | \$ (9,399) | \$ (4,436) | \$ (4,707) | \$ (2,835) | \$ (2,686) |
| Net Local Government Revenue | Thousands of Nominal Dollars | \$ 165     | \$ 2,170   | \$ 1,555   | \$ 1,787   | \$ 1,002   |

**Table A-5. Projected Economic and Fiscal Impact of Additional Tax Deduction (2.5% Economic Migration)**

|                              | 2021                         | 2022       | 2023       | 2024       | 2025       |            |
|------------------------------|------------------------------|------------|------------|------------|------------|------------|
| Total Employment             | Individuals (Jobs)           | 97         | 3,015      | 3,485      | 4,798      | 5,283      |
| Total Compensation           | Thousands of Nominal Dollars | \$ 1,346   | \$ 156,195 | \$ 164,334 | \$ 232,648 | \$ 250,952 |
| Disposable Personal Income   | Thousands of Nominal Dollars | \$ 32,154  | \$ 263,490 | \$ 313,551 | \$ 452,232 | \$ 539,945 |
| Gross Domestic Product       | Thousands of Nominal Dollars | \$ 7,968   | \$ 289,780 | \$ 337,055 | \$ 465,861 | \$ 509,221 |
| Output                       | Thousands of Nominal Dollars | \$ 13,335  | \$ 465,310 | \$ 543,385 | \$ 751,217 | \$ 823,846 |
| Net State Government Revenue | Thousands of Nominal Dollars | \$ (9,495) | \$ 6,012   | \$ 6,154   | \$ 12,503  | \$ 13,572  |
| Net Local Government Revenue | Thousands of Nominal Dollars | \$ (575)   | \$ 5,474   | \$ 3,678   | \$ 4,310   | \$ 1,855   |

**Table A-6. Projected Economic and Fiscal Impact of Additional Tax Deduction (5% Economic Migration)**

|                              | 2021                         | 2022       | 2023         | 2024         | 2025         |              |
|------------------------------|------------------------------|------------|--------------|--------------|--------------|--------------|
| Total Employment             | Individuals (Jobs)           | 389        | 8,066        | 9,200        | 12,398       | 13,571       |
| Total Compensation           | Thousands of Nominal Dollars | \$ 14,528  | \$ 426,236   | \$ 453,934   | \$ 632,289   | \$ 687,191   |
| Disposable Personal Income   | Thousands of Nominal Dollars | \$ 61,451  | \$ 621,463   | \$ 719,759   | \$ 1,042,378 | \$ 1,234,189 |
| Gross Domestic Product       | Thousands of Nominal Dollars | \$ 31,027  | \$ 766,010   | \$ 879,833   | \$ 1,194,074 | \$ 1,296,922 |
| Output                       | Thousands of Nominal Dollars | \$ 50,946  | \$ 1,228,560 | \$ 1,416,476 | \$ 1,922,771 | \$ 2,095,331 |
| Net State Government Revenue | Thousands of Nominal Dollars | \$ (7,490) | \$ 42,165    | \$ 47,762    | \$ 69,108    | \$ 76,838    |
| Net Local Government Revenue | Thousands of Nominal Dollars | \$ (662)   | \$ 20,140    | \$ 19,344    | \$ 24,310    | \$ 22,085    |