

# Economic Impact of Medicaid on South Carolina

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## Executive Summary

This study analyzes the impact of Medicaid, the health care insurance program, on South Carolina's economic development. South Carolina is considering budget reductions for Medicaid programs because of revenue shortfalls. Cutbacks could have serious economic implications, however. The money the state would "save" by reducing Medicaid allocations could have significant repercussions for the economy because the state would lose federal Medicaid matching payments. This loss of federal dollars comes at a time when the federal government is trying to stimulate the economy through increased spending. Medicaid is especially important because it provides health care services. It also spreads economic benefits throughout the state, in both urban and rural communities. Without the federal Medicaid match, some portion of the health care costs of the poor would be shifted to local communities (in particular, emergency rooms and other uncompensated care for the poor).

Using a state-of-the-art economic impact model for South Carolina and its 46 counties, the researchers found that Medicaid cuts have a palpable effect on jobs and income. The impact results from the direct loss of funds and the linkages between health services and other businesses. Hospitals and other health care businesses purchase various inputs from local area suppliers. These input purchases provide an important source of additional economic activity. Further, the employees working directly in the health care industry earn incomes that are spent and re-spent throughout the community, creating a ripple effect.

This study reveals that the economic ripple effect of the federal match for Medicaid totals \$2.1 billion, a substantial sum for an economy the size of South Carolina. Overall, the federal match supports more than 61,000 jobs and \$1.5 billion in income for South Carolina citizens through the economic ripple effect.

A state funding cut of 4 percent would cause the state to give up the corresponding federal match. The loss of the matching funds would lead to the loss of 2,472 jobs and more than \$60 million in income.

A 10 percent cut would potentially lead to losses of 6,180 jobs and \$150 million income across the Palmetto State. The study shows that the effects of Medicaid cuts would be strongly felt in every region and county of South Carolina. In an alternative scenario where the state contributes \$47 million in additional funds (a 5.3 percent increase), the federal match rises by \$109.7 million. Then the state would gain 3,257 jobs and \$79 million in income.

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# Economic Impact of Medicaid on South Carolina

## Introduction

Expanding employment opportunities and rising incomes are important goals of South Carolina policy makers. In periods of sluggish employment growth and contracting business activity, the need for job opportunities becomes even more pressing. Yet when the state's economy slows, tax revenue declines as well. Given the state's balanced budget constraint, it is sometimes necessary to cut state expenditures. It is hard to promote economic development when the economy is not growing. In such a climate, almost every agency makes a claim to support economic development—adding to the job and income base. Some observers suggest that any appropriation cuts would lead to job loss.

It is certainly true that many publicly-supported activities contribute to the state's economic development. To create *new* jobs and income, however, money must be received from outside the state. That is why export-oriented manufacturing plants and out-of-state tourists contribute to growth: they bring new spending to the state, and this spending translates into new income for South Carolina citizens. It is a well-accepted economic principle that economic development depends on incremental money flowing from outside the region. Otherwise, there is no net increase in spending, and no new job creation, only a reallocation of jobs and income among different industries and regions.

In fact, most state government expenditures reallocate spending from one sector of the economy to another—with no net state income or jobs directly resulting from state government spending. Specific agency functions may support economic development, but they do not create more jobs and income in the overall economy.

State Medicaid funding is, however, a net job and income generator for South Carolina. Medicaid expenditures involve an injection into South Carolina's income stream, rather than a reallocation of existing income, because they entail a substantial federal match that adds health care funding that otherwise would be taken from local communities or lost altogether. The federal match enters South Carolina's economy to the extent that the state government contributes to Medicaid. Conversely, when the state cuts Medicaid funds, the state loses the federal match and health care spending declines proportionately.

Clearly, Medicaid cuts can have real implications for jobs across the communities of South Carolina. But to what extent do cutbacks lead to job and income losses?

This report analyzes the potential economic impact of Medicaid expenditure cutbacks at the state and county level across South Carolina. The report documents how reduced Medicaid expenditures will have ripple effects that impact not just the health care industry, but also other sectors of the South Carolina economy. Beyond health care, the spending supports many business activities. From the Low Country to the Upstate, Medicaid spending adds significantly to the local job base.

### The Health Care Industry in South Carolina

Health care is a vital service, but is not often considered an engine of economic growth. Yet, health care is a major industry in the United States, accounting for 12 percent of gross domestic product. It is also a large part of state and local economies across the country.

The regional economic impact is often overlooked in South Carolina. Health care providers, however, exist throughout the state, benefiting every community. Health care services are especially important in the state's rural areas, where a system of hospitals and other facilities not only meet the essential health needs of the population, but also form an important economic backbone for rural communities.

In 2000, South Carolina health services accounted for 94,200 jobs, or about 5 percent of the state's employment base. Through linkages with other sectors that are tied to health care providers, the total employment supported by the industry amounted to 131,416 in 2000. The total economic value of the state's health care industry is about \$7.4 billion. This measure is an estimate of the economic value of the production of goods and services that are directly and indirectly supported by the health care industry. Specifically, this definition of the health care industry corresponds with the government classification for health services. The figure is considered to be conservative—a low estimate—because it does not include a vast array of health-related services like pharmacies and alternative medicine.

Beyond the economic effects that are the focus of this study, the presence of the health care institutions adds to the quality of life in a community. This can help attract businesses and generate employment and income, adding to the local economy in ways that are difficult to measure but essential to economic development.

Medicaid, the insurance program for less-advantaged citizens, is a critical component of the state's health care system. It covers one-fifth of South Carolinians. The coverage includes 50 percent of

babies born in South Carolina, more than 40 percent of the state's children, and 75 percent of the elderly in nursing homes. The next section explains how Medicaid is linked to other sectors of the state's economic base.

### The Medicaid Multiplier

The economic impact of Medicaid on South Carolina can be estimated by analyzing the multiplier effect of the federal Medicaid match. For every dollar spent by the state government, the federal government matches the spending by approximately \$2.33 (some programs receive a much higher match rate, some are lower). Medicaid money generated from outside South Carolina injects new spending into the health care system. This spending then becomes income for health care workers and suppliers.

The *direct* economic impact of Medicaid spending is represented by the local expenditures by hospitals, nursing homes, and other health-care businesses. Eventually, the injection of new money touches off a ripple effect, or multiplier, that creates income and jobs for individuals not directly, or even indirectly, associated with health care. For example, health care employees spend part of their salaries on new cars, which leads auto dealer employees to spend part of their salaries on groceries, and so on.

The Medicaid multiplier effect stems from several sources. In part, health care providers supported by Medicaid funds purchase supplies in South Carolina. The suppliers receive this income and then spend some of that income in-state, leading to further rounds of income and expenditures by other businesses and individuals. This is called the *indirect* effect. Moreover, employee income in the health care system that is supported by Medicaid expenditures will be spent, creating yet another impact. This effect is the *induced* impact. In each round of the spending and income cycle, some of the impact dissipates as the money is taxed, saved, or used to buy goods and services outside of the state. The multiplier effect continues, but grows smaller, as spending turns into income, and then is spent as a smaller share. The total economic impact of the Medicaid funding encompasses all the effects of spending and income circulating through the economy of the region.



### Economic Impact Definitions

**Direct Impact.** *These are expenditures that are injected into the state's economy.*

**Indirect Impact.** *These are the ripple effects on other industries based on input-output analysis.*

**Induced Impact.** *These are impacts of household expenditures from wages and salaries.*

**Total Impact.** *The sum of the direct, indirect, and induced impacts.*

Using well-accepted methods, researchers at the Division of Research (DOR) at the Moore School of Business, the University of South Carolina, measured the extent to which the Medicaid funds stimulate the South Carolina economy. This economic multiplier effect can work in reverse when expenditures are cut. The state’s economic base erodes when Medicaid money flowing from outside South Carolina declines with state cutbacks.

Using information provided by the Department of Health and Human Services on Medicaid expenditures at the state and county level, the research team estimated the economic multiplier effect of the total federal match (using 2001 figures) and potential Medicaid cuts, using the two most common impact measures—employment and income. The total federal match is taken to be \$2.1 billion.

As discussed earlier, the economic impact of state Medicaid cuts starts with the jobs and income lost directly in the health care industry of South Carolina. This loss of spending adversely affects the local health care sector by the lower level of support for direct employment and income. Federal matching cuts are the only direct losses considered in this analysis, since this is the money that will no longer flow to the state from outside. This direct input reflects more conservative assumptions than typically found in impact analyses. It means that the state spending cut has no effect on the economy. The total impact is then determined by the direct impact times the specific multipliers for health care services in South Carolina. Thus, we examine the impact of state Medicaid cuts of both 4 and 10 percent by calculating the spending loss from the federal match, and then estimate the total impact using an economic impact model.

The impact model employed is IMPLAN, a form of “input-output” analysis used across the United States. Input-output analysis is the method used to calculate detailed employment and income effects of changes in the economy for different industries and regions. In this case, the model takes the changes from Medicaid as the starting inputs and calculates the indirect and induced impacts on the state’s economy and on individual counties. The model generates indirect and induced impacts based on the most recent data available for South Carolina.

## Results

Table 1 presents the results of the impact analysis for South Carolina. First, consider the federal match for Medicaid of \$2.1 billion. Through the multiplier effect, this influx of money into the health care system of South Carolina supports more than 61,000 jobs and generates \$1.5 billion in total income for South Carolina citizens. These total impacts combine the direct, indirect, and induced effects of the federal match into one summary impact measure. Recall that the federal match supports purchases by health service entities and direct wages and salaries.

If South Carolina cuts Medicaid by 4 percent, this would cause the state to give up the corresponding federal match. The loss of the matching funds would lead to the loss of 2,472 jobs and more than \$60 million in income after the direct, indirect, and induced effects are taken into account. A 10 percent cut would potentially lead to losses of 6,181 jobs and more than \$150 million in income across the Palmetto State. An alternative scenario considers a \$47 million increase (5.27 percent) in the state contribution for Medicaid, leading to an influx of \$109.7 million in federal matching dollars. This would generate 3,257 more jobs and more than \$79 million in income for South Carolinians.

The effects of Medicaid cuts would be felt in every county. Table 2 shows the impact results for all South Carolina counties. The counties are summarized across eight regions of the state for each scenario.

**Table 1**  
**Impact of Medicaid on Jobs and Income**

	<i>Jobs</i>	<i>Income</i>
Total Impact	61,807	\$1,505,034,643
4 Percent Cut	(2,472)	(\$60,201,386)
10 Percent Cut	(6,181)	(\$150,503,464)
\$47 million increase	3,257	\$79,315,326

Table 2. Medicaid Impacts Summary, Federal Match Only

County	TOTAL		LOSS FROM 4%		LOSS FROM 10%		INCREASE OF 5.27%	
	Jobs	Income	Jobs	Income	Jobs	Income	Jobs	Income
<i>Augusta-Aiken Region</i>								
AIKEN	1,430	\$34,733,871	57	\$1,389,355	143	\$3,473,387	75	\$1,830,475.00
ALLENDALE	179	\$3,180,321	7	\$127,213	18	\$318,032	9	\$167,602.92
BAMBERG	376	\$6,573,689	15	\$262,948	38	\$657,369	20	\$346,433.41
BARNWELL	508	\$7,544,084	20	\$301,763	51	\$754,408	27	\$397,573.23
EDGEFIELD	189	\$2,992,903	8	\$119,716	19	\$299,290	10	\$157,725.99
<b>Augusta-Aiken Total</b>	<b>2,682</b>	<b>\$55,024,868</b>	<b>107</b>	<b>\$2,200,995</b>	<b>268</b>	<b>\$5,502,487</b>	<b>141</b>	<b>\$2,899,811</b>
<i>Charleston Region</i>								
BERKELEY	713	\$11,760,199	29	\$470,408	71	\$1,176,020	38	\$619,762
CHARLESTON	7,027	\$200,541,137	281	\$8,021,645	703	\$20,054,114	370	\$10,568,518
DORCHESTER	1,268	\$22,901,029	51	\$916,041	127	\$2,290,103	67	\$1,206,884
<b>Charleston Total</b>	<b>9,008</b>	<b>\$235,202,365</b>	<b>360</b>	<b>\$9,408,095</b>	<b>901</b>	<b>\$23,520,237</b>	<b>475</b>	<b>\$12,395,165</b>
<i>Charlotte-Rock Hill Region</i>								
CHESTER	323	\$7,116,631	13	\$284,665	32	\$711,663	17	\$375,046
LANCASTER	744	\$16,801,786	30	\$672,071	74	\$1,680,179	39	\$885,454
YORK	1,372	\$34,740,631	55	\$1,389,625	137	\$3,474,063	72	\$1,830,831
<b>Charlotte-Rock Hill Total</b>	<b>2,439</b>	<b>\$58,659,048</b>	<b>98</b>	<b>\$2,346,362</b>	<b>244</b>	<b>\$5,865,905</b>	<b>129</b>	<b>\$3,091,332</b>
<i>Grand Strand Region</i>								
GEORGETOWN	901	\$22,579,677	36	\$903,187	90	\$2,257,968	47	\$1,189,949
HORRY	2,069	\$48,720,569	83	\$1,948,823	207	\$4,872,057	109	\$2,567,574
<b>Grand Strand Total</b>	<b>2,970</b>	<b>\$71,300,246</b>	<b>119</b>	<b>\$2,852,010</b>	<b>297</b>	<b>\$7,130,025</b>	<b>157</b>	<b>\$3,757,523</b>
<i>Lowcountry Region</i>								
BEAUFORT	736	\$22,655,578	29	\$906,223	74	\$2,265,558	39	\$1,193,949
COLLETON	701	\$14,127,095	28	\$565,084	70	\$1,412,710	37	\$744,498
HAMPTON	265	\$4,628,023	11	\$185,121	27	\$462,802	14	\$243,897
JASPER	129	\$3,686,584	5	\$147,463	13	\$368,658	7	\$194,283
<b>Lowcountry Total</b>	<b>1,831</b>	<b>\$45,097,280</b>	<b>73</b>	<b>\$1,803,891</b>	<b>183</b>	<b>\$4,509,728</b>	<b>97</b>	<b>\$2,376,627</b>

Table 2 Continued

*Midlands Region*

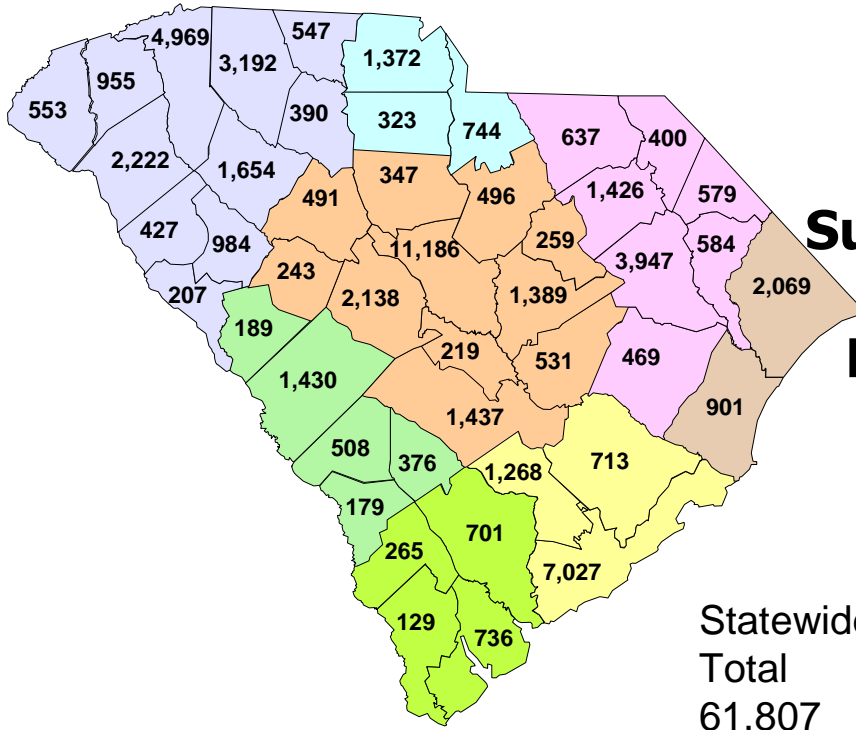
CALHOUN	219	\$3,403,818	9	\$136,153	22	\$340,382	12	\$179,381
CLARENDON	531	\$11,563,606	21	\$462,544	53	\$1,156,361	28	\$609,402
FAIRFIELD	347	\$6,440,860	14	\$257,634	35	\$644,086	18	\$339,433
KERSHAW	496	\$10,581,504	20	\$423,260	50	\$1,058,150	26	\$557,645
LEE	259	\$4,212,733	10	\$168,509	26	\$421,273	14	\$0
LEXINGTON	2,138	\$47,452,519	86	\$1,898,101	214	\$4,745,252	113	\$2,500,748
NEWBERRY	491	\$8,271,667	20	\$330,867	49	\$827,167	26	\$435,917
ORANGEBURG	1,437	\$36,321,610	57	\$1,452,864	144	\$3,632,161	76	\$1,914,149
RICHLAND	11,186	\$298,425,058	447	\$11,937,002	1,119	\$29,842,506	589	\$15,727,001
SALUDA	243	\$3,121,482	10	\$124,859	24	\$312,148	13	\$164,502
SUMTER	1,389	\$32,944,936	56	\$1,317,797	139	\$3,294,494	73	\$1,736,198
<b>Midlands Total</b>	<b>18,736</b>	<b>\$462,739,793</b>	<b>749</b>	<b>\$18,509,592</b>	<b>1,874</b>	<b>\$46,273,979</b>	<b>987</b>	<b>\$24,164,376</b>

*Pee Dee Region*

CHESTERFIELD	637	\$10,909,292	25	\$436,372	64	\$1,090,929	34	\$574,920
DARLINGTON	1,426	\$25,128,930	57	\$1,005,157	143	\$2,512,893	75	\$1,324,295
DILLON	579	\$11,477,910	23	\$459,116	58	\$1,147,791	31	\$604,886
FLORENCE	3,947	\$96,916,432	158	\$3,876,657	395	\$9,691,643	208	\$5,107,496
MARION	584	\$16,265,493	23	\$650,620	58	\$1,626,549	31	\$857,191
MARLBORO	400	\$8,440,075	16	\$337,603	40	\$844,008	21	\$444,792
WILLIAMSBURG	469	\$9,440,505	19	\$377,620	47	\$944,051	72	\$497,515
<b>Pee Dee Total</b>	<b>8,042</b>	<b>\$178,578,637</b>	<b>322</b>	<b>\$7,143,145</b>	<b>804</b>	<b>\$17,857,864</b>	<b>471</b>	<b>\$9,411,094</b>

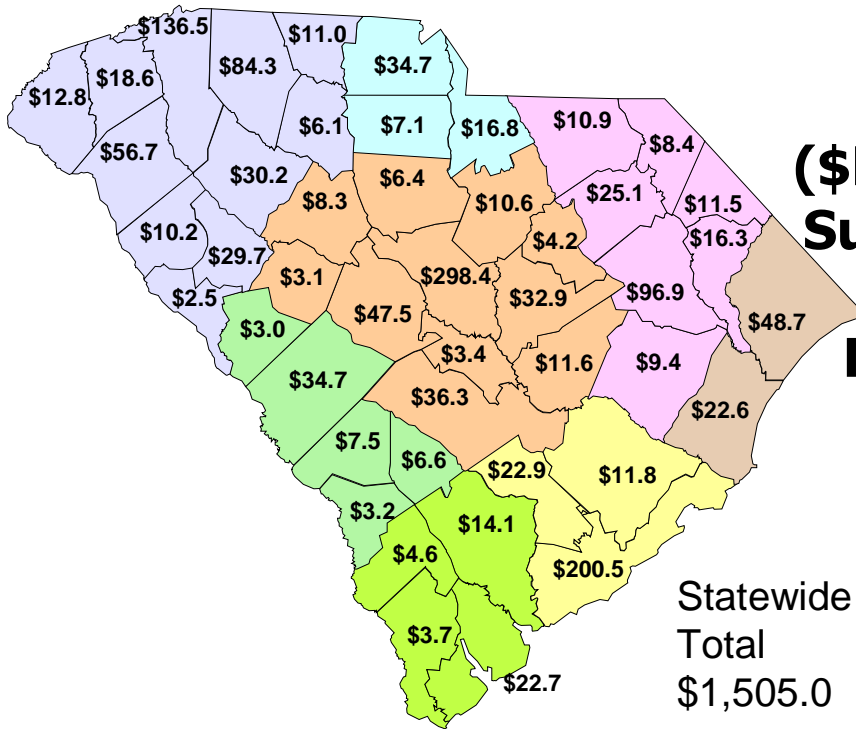
*Upstate Region*

ABBEVILLE	427	\$10,203,540	17	\$408,142	43	\$1,020,354	23	\$537,727
ANDERSON	2,222	\$56,680,911	89	\$2,267,236	222	\$5,668,091	117	\$2,987,084
CHEROKEE	547	\$10,972,588	22	\$438,904	55	\$1,097,259	29	\$578,255
GREENVILLE	4,969	\$136,505,241	199	\$5,460,210	497	\$13,650,524	262	\$7,193,826
GREENWOOD	984	\$29,715,532	39	\$1,188,621	98	\$2,971,553	52	\$1,566,009
LAURENS	1,654	\$30,162,021	66	\$1,206,481	165	\$3,016,202	87	\$1,589,539
MCCORMICK	207	\$2,458,455	8	\$98,338	21	\$245,846	11	\$129,561
OCONEE	553	\$12,825,072	22	\$513,003	55	\$1,282,507	29	\$675,881
PICKENS	955	\$18,553,509	38	\$742,140	95	\$1,855,351	50	\$977,770
SPARTANBURG	3,192	\$84,273,930	128	\$3,370,957	319	\$8,427,393	168	\$4,441,236
UNION	390	\$6,081,607	16	\$243,264	39	\$608,161	21	\$320,501
<b>Upstate Total</b>	<b>16,099</b>	<b>\$398,432,406</b>	<b>644</b>	<b>\$15,937,296</b>	<b>1,610</b>	<b>\$39,843,241</b>	<b>848</b>	<b>\$20,997,388</b>



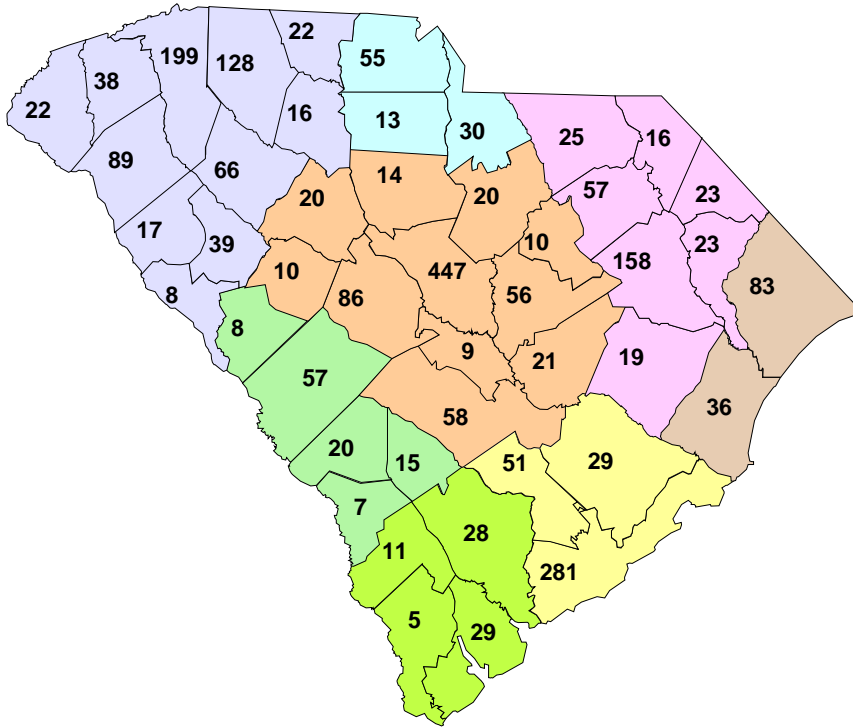
## Jobs Supported by Medicaid Federal Match, Current

Statewide Total  
61,807



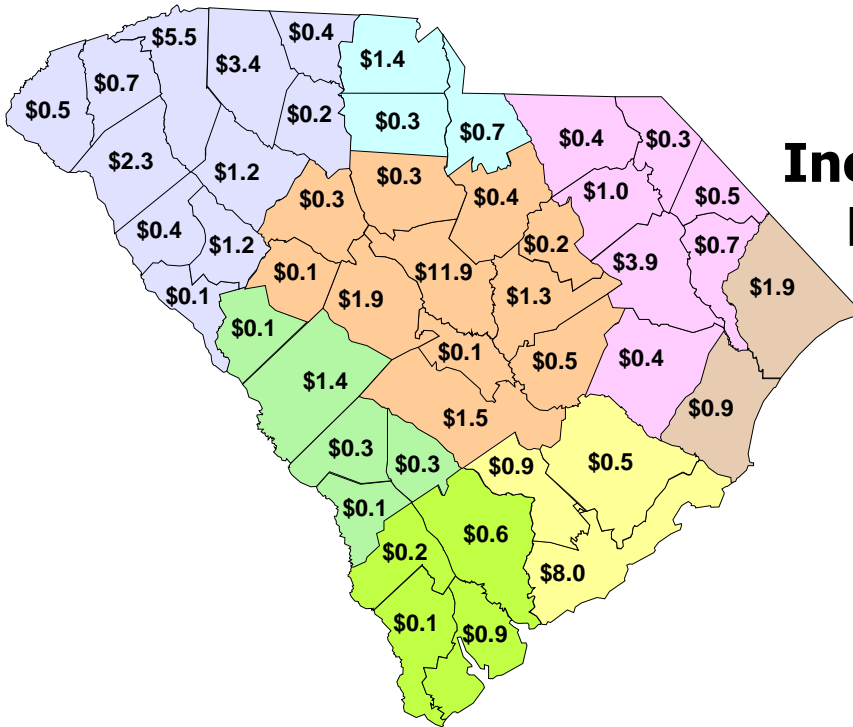
## Income (\$Millions) Supported by Medicaid Federal Match, Current

Statewide Total  
\$1,505.0



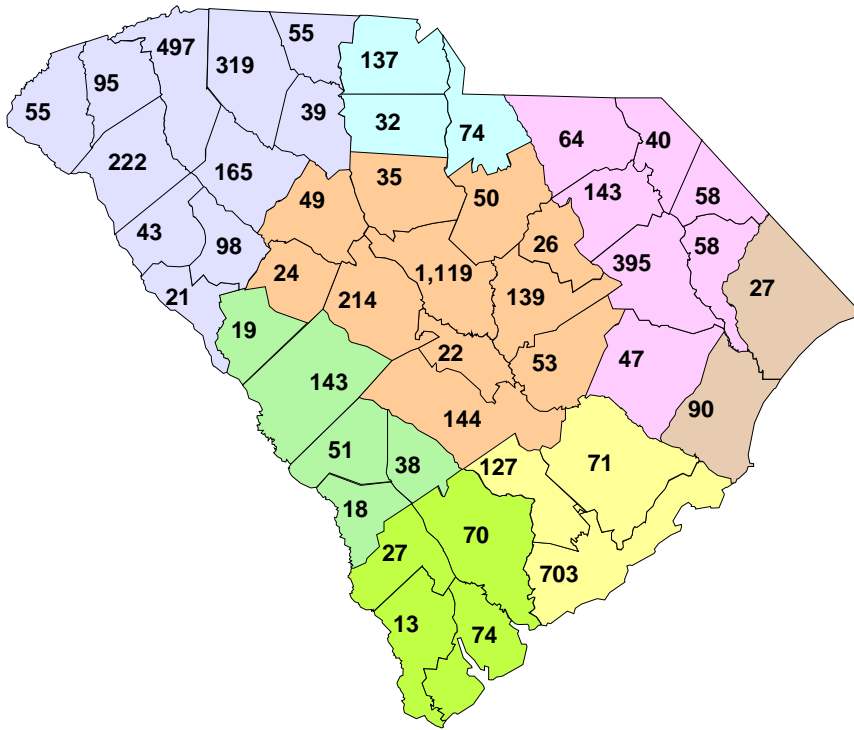
## Job Loss From 4% Cut

Statewide Total  
2,473



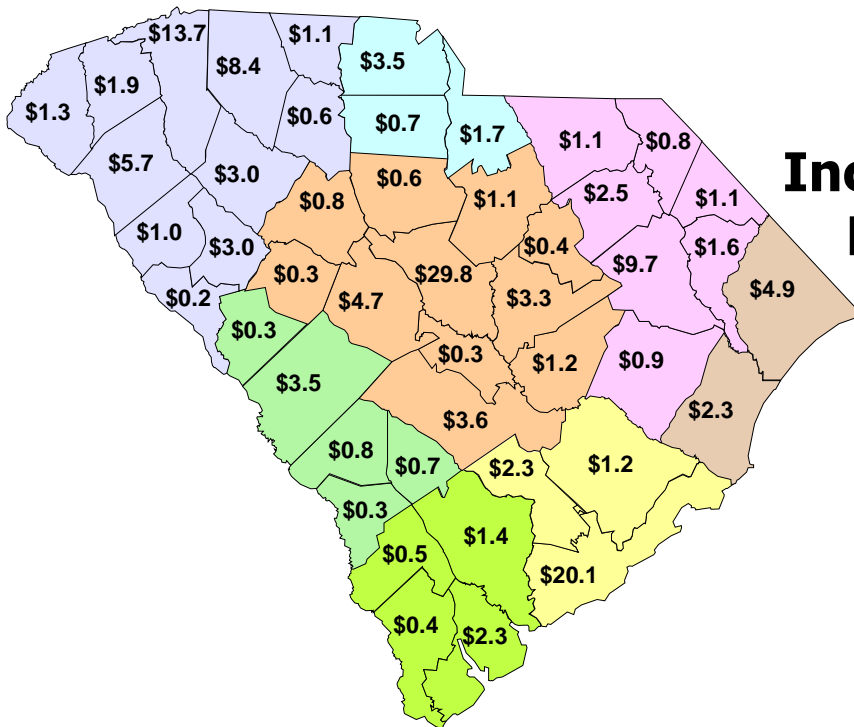
## Income (in Millions) Loss From 4% Cut

Statewide Total  
\$60.2



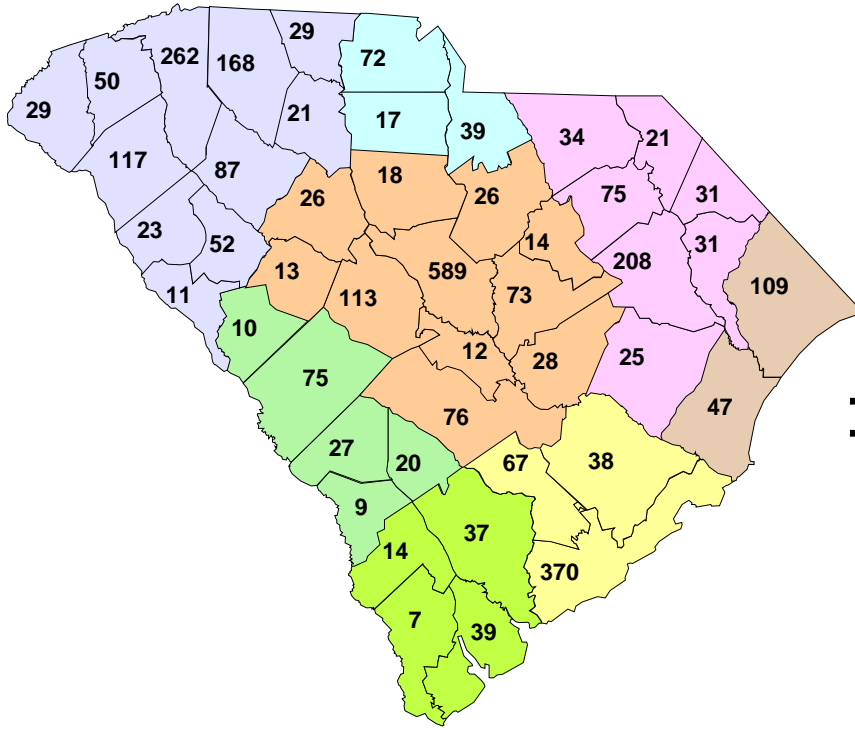
**Job  
Loss  
From  
10%  
Cut**

Statewide  
Total  
6,181



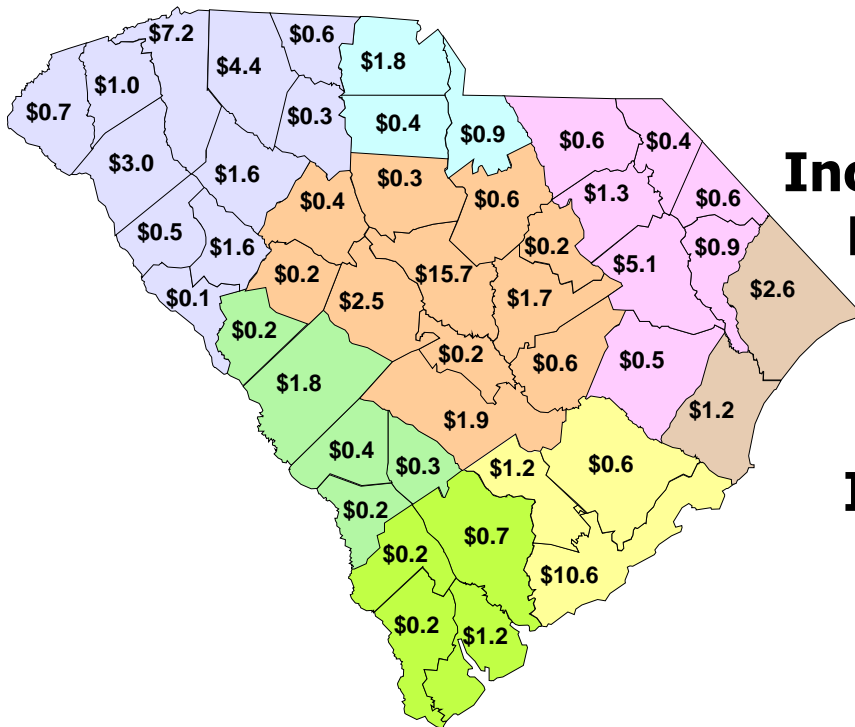
**Income (in  
Millions)  
Loss  
From  
10%  
Cut**

Statewide  
Total  
\$150.5



## Job Gain From 5.3% Increase

Statewide Total  
3,257



## Income (in Millions) Gain From 5.3% Increase

Statewide Total  
\$79.3