

# The Economic Impact of Medicaid Expansion in Georgia

by William S. Custer, Ph.D.

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RECOMMENDED CITATION:

The Economic Impact of Medicaid Expansion in Georgia, William S. Custer, Ph.D.,  
Institute of Health Administration, J. Mack Robinson College of Business, Georgia State  
University, Healthcare Georgia Foundation, Publication #74, February 2013.

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## ABOUT THIS ANALYSIS

As a statewide funder of Georgia's health safety net, Healthcare Georgia Foundation's efforts are directed to expanding access to affordable quality healthcare for underserved individuals and communities and in order to achieve optimal use of our resources it is important to understand the impact of health policy decisions on underserved and uninsured populations.

Healthcare Georgia Foundation commissioned an analysis of the economic impact of Medicaid expansion in Georgia. The analysis, conducted and reported by William Custer, PhD, J. Mac Robinson College of Business at Georgia State University, found that expansion of the program could result in significant statewide economic activity. Dr. Custer utilized the IMPLAN model to produce estimates of economic impact based on data provided by the state including 1) the number of new enrollees in the Medicaid Program as a result of expansion, 2) the costs of medical care for those enrollees, and 3) the state's share of Medicaid expansion.

## INTRODUCTION

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Provisions of the Patient Protection and Affordable Care Act (ACA) expanded eligibility for the Medicaid program and changed the portion of the costs of the program paid by the Federal Government. The Supreme Court ruled that this expansion was so different from the existing Medicaid program that the law had created essentially two distinct programs. The net effect of this ruling is that Georgia and other states have to decide if they are going to participate in the Medicaid expansion program.

The Georgia Department of Community Health has estimated the amount of new Federal expenditures in Georgia if the state chooses to expand to be over \$40 billion over the first decade of implementation. Aside from the direct effects on the health of Georgians, this amount of new money will also generate new economic development within the state.

Current Medicaid eligibility is based on income and other enrollee characteristics. Medicaid expands in the ACA to those not currently eligible by changing eligibility to a simple family income threshold. All individuals in families with incomes less than 133 percent of the Federal Poverty Level (FPL) are eligible for Medicaid (there is a 5% disregard so the effective income limit is 138% of poverty).

4 The Medicaid program is jointly funded by the state and the Federal government. In the existing Medicaid program, federal government matches state expenditures at a rate determined by the ratio of the state's per capita income to the national per capita income. In Georgia, the Federal government contributed 66.16% of the cost of Medicaid in 2012.

If the state expands, the Federal government will pay 100 percent of the cost of newly-eligible up to 133 percent of the FPL for calendar years 2014 through 2016. In 2017, the matching rate will be 95 percent; in 2018, it will be 94 percent; in 2019, it will be 93 percent; and in 2020 and future years, it will be 90 percent.

If Georgia elects to expand coverage, the flow of new dollars into the state could generate a considerable amount of economic activity. It is estimated that Georgia would receive an additional \$40.5 billion in Medicaid funds from 2014-2023 if it were to participate. Using IMPLAN modeling software, the analysis found that the additional Medicaid spending generated wages and revenue that supported on average a total of 70,343 jobs statewide (see Table 1). Annually these additional jobs would add an average \$8.2 billion to statewide economic output. This additional economic activity would generate increased state and local tax revenue, which was estimated to be on average \$276.5 million annually.

**TABLE 1:** Georgia State Average Annual Economic Impact (in millions of 2012 dollars)

IMPACT TYPE	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
Direct Effect	36,676	\$2,115.1	\$2,291.2	\$4,037.2
Indirect Effect	11,587	\$526.4	\$978.8	\$1,478.4
Induced Effect	22,079	\$916.3	\$1,683.5	\$2,661.5
<b>TOTAL EFFECT</b>	<b>70,343</b>	<b>\$3,557.7</b>	<b>\$4,953.5</b>	<b>\$8,177.1</b>

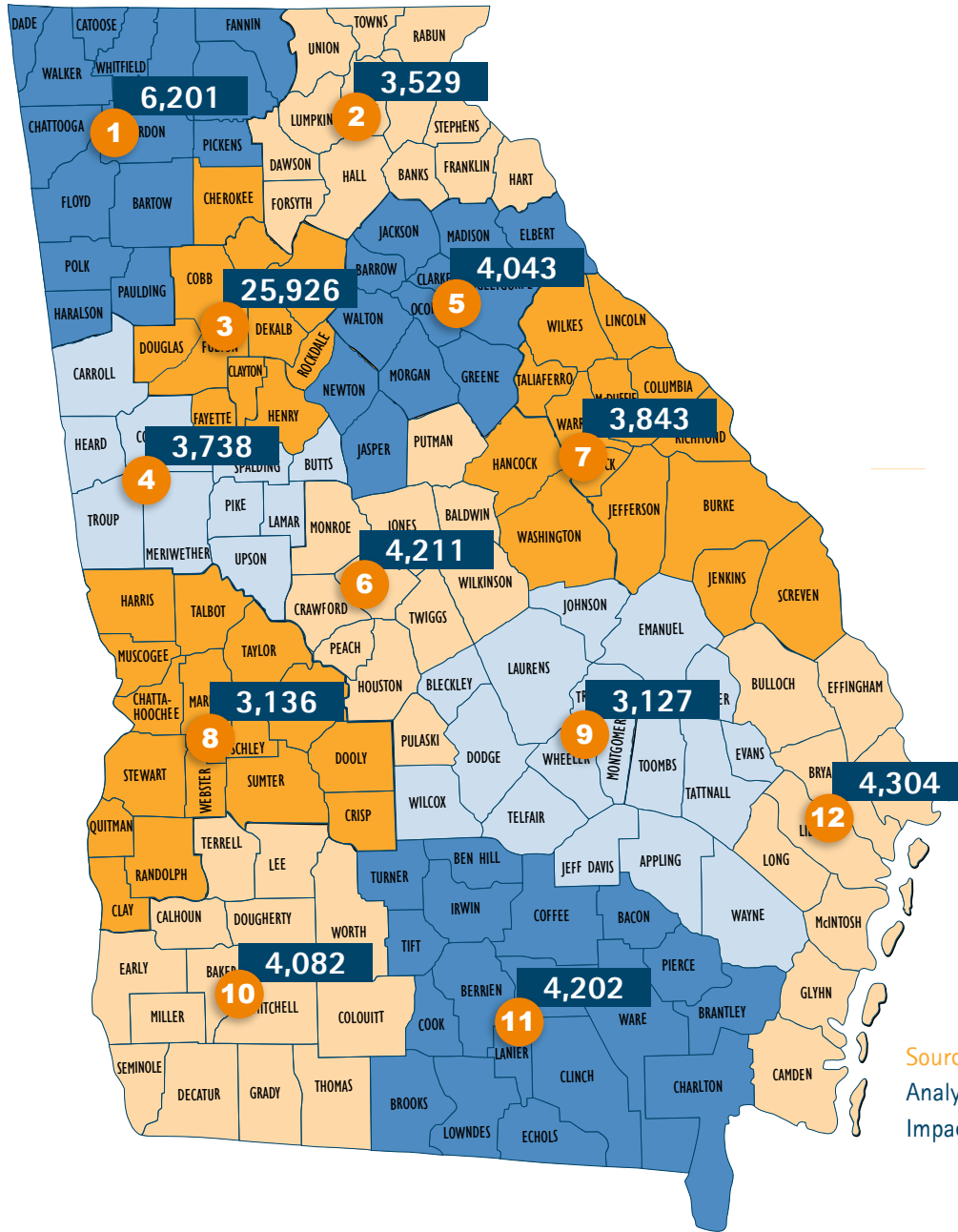
Just over half of the jobs created by Medicaid expansion would be in health care. Table 2 lists the top 10 industries in Georgia that would be affected by the Medicaid expansion. Non-medically related industries that would see job growth include: real estate establishments; food services and drinking places; employment services; wholesale trade businesses; and, services to buildings and dwellings.

**TABLE 2:** The Top-10 Affected Industry Sectors By Employment (\$ amount in Millions)

SECTOR	DESCRIPTION	EMPLOYMENT	OUTPUT
397	Private hospitals	15,154	\$1,926
394	Offices of physicians, dentists, and other health practitioners	9,511	\$1,186
395	Home health care services	9,500	\$557
396	Medical and diagnostic labs and other ambulatory care	3,959	\$540
360	Real estate establishments	3,190	\$463
413	Food services and drinking places	3,053	\$171
382	Employment services	2,491	\$89
336	Transit and ground passenger transportation	1,226	\$64
319	Wholesale trade businesses	954	\$163
388	Services to buildings and dwellings	910	\$55

**FIGURE 1: Jobs Created by Medicaid Expansion In Georgia by Service Delivery Area**

The economic impact of Medicaid expansion would vary by geographic region across Georgia, reflecting both the distribution of the population and health care providers. The economic impacts were estimated for each of the twelve State Service Delivery Regions as defined by the Georgia Department of Community Affairs (see Figure 1).



Source: Georgia State University Analysis of Medicaid Expansion Impact.

**TABLE 3:** Regional Share of Total Regional Average Annual Economic Impact (\$ in Millions)

REGION	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
1 Northwest Georgia	6,201	\$283	\$1,926	\$677
2 Georgia Mountains	3,529	\$163	\$228	\$386
3 Atlanta Regional	25,926	\$1,537	\$2,146	\$3,364
4 Three Rivers	3,738	\$180	\$251	\$418
5 Northeast Georgia	4,043	\$178	\$253	\$431
6 Middle Georgia	4,211	\$195	\$274	\$462
7 Central Savannah River Area	3,843	\$182	\$251	\$428
8 River Valley	3,136	\$153	\$208	\$355
9 Heart of Georgia	3,127	\$130	\$176	\$319
10 Southwest Georgia	4,082	\$180	\$245	\$427
11 Southern Georgia	4,202	\$168	\$236	\$426
12 Coastal RC of Georgia	4,304	\$209	\$290	\$485
<b>Total Georgia</b>	<b>70,343</b>	<b>\$3,558</b>	<b>\$4,954</b>	<b>\$8,177</b>

Although the Atlanta region contains about half of all Georgians, just under 37 percent of the jobs created by Medicaid expansion would occur in the Atlanta region. The next region with the greatest impact is Northwest Georgia (see Table 3).

**STATE AND LOCAL TAX EFFECTS**

New economic activity will also generate new state and local tax collection estimates. The estimates for the additional tax revenues are presented in Table 4. These estimates are based on aggregate amounts collected for the tax, based on state or local data, and then apportioned based on either local income or consumption data.

**TABLE 4:** Estimated State and Local Average Annual Tax Collections (in millions of 2012 dollars)

Local Tax collections	\$146.1
State Tax collections	\$130.5
<b>TOTAL STATE AND LOCAL TAX</b>	<b>\$276.5</b>

In this analysis, the state and local taxes estimated only include the indirect and induced economic impacts for state and local sales tax and local property tax. Taxes levied on health care providers are not included in these estimates, as many are likely to be exempted by state law.

Table 4 shows state and local annual average estimated tax collections. Total annual average state and local tax collections are estimated to be \$276.5 million. Local tax collections are estimated to be on average \$146.1 million, annually. Local taxes include property tax collections and local option sales taxes, which are estimated at a rate of 3 percent. State tax collections are estimated to be approximately \$130.5 million annually.

# APPENDICES



## APPENDIX A: Methods

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This analysis assessed the statewide economic impact of additional Federal Medicaid spending in Georgia due to The Patient Protection and Affordable Care Act. This analysis will be performed using IMPLAN.<sup>1</sup>

IMPLAN is a computer input-out model that quantifies the interactions between industries, aggregated into sectors, within the economy. The model generates transaction tables that reflect the value of goods and services exchanged between sectors of the economy. These values are used to generate the multipliers necessary to estimate the economic impact of the additional Medicaid spending to Georgia and its State Service Delivery Regions.

The number of new Medicaid enrollees in Georgia as a result of Medicaid expansion is estimated using information drawn from four data sources:

- 2008, 2009, and 2010 Census Bureau's Current Population Survey (CPS)
- 2009 Medical Expenditure Panel (MEPS)
- 2011 GHPC's Georgia Employer Survey
- 2008 Georgia Population Survey

Estimates were generated of the number of newly enrolled Medicaid recipients in the state and in each of the 12 Service Delivery Regions within the state.

The total costs of the Medicaid expansion population was estimated by multiplying the number of new enrollees times an estimate of their average annual cost. Most of the individuals who would gain eligibility under Medicaid expansion are currently uninsured. There is some uncertainty over the costs of caring for these individuals. Adults in the Medicaid program cost \$4,424 per year in 2009.<sup>2</sup> That average annual costs adjusted for inflation was used to estimate total Medicaid costs. The Department of Community Health estimated the costs to the state for this Medicaid expansion. The state costs were deducted from the total costs to get the Federal Expenditures. The percentage of Federal taxes paid by Georgia taxpayers were netted out of the Federal Expenditures.

<sup>1</sup> The IMPLAN analysis was performed by Peter Bluestone, Research Associate, Fiscal Research Center, Georgia State University

<sup>2</sup> Kaiser Family Foundation: State Health Facts.org accessed at <http://www.statehealthfacts.org/comparemaptable.jsp?ind=183&cat=4>

**TABLE A1: Projected Costs of Medicaid Expansion In Georgia**

YEAR	TOTAL MEDICAID EXPENDITURES	STATE EXPENDITURES	NET FEDERAL EXPENDITURES	NEW ENROLEES
2014*	1,675,406,373	\$79,600,000	\$1,494,900,000	620,172
2015	3,360,744,966	\$224,900,000	\$3,034,100,000	625,326
2016	4,198,807,865	\$210,100,000	\$3,885,500,000	634,317
2017	4,473,049,385	\$324,200,000	\$4,044,300,000	642,562
2018	4,713,308,152	\$404,900,000	\$4,202,500,000	650,913
2019	4,941,484,491	\$458,500,000	\$4,375,700,000	659,372
2020	5,315,878,891	\$655,900,000	\$4,551,300,000	667,942
2021	5,550,591,351	\$710,000,000	\$4,730,500,000	676,623
2022	5,765,622,197	\$737,000,000	\$4,917,100,000	685,417
2023	5,989,065,391	\$764,996,900	\$5,111,096,900	694,325
<b>TOTAL FOR DECADE</b>	<b>45,983,959,061</b>	<b>\$4,570,096,900</b>	<b>\$40,346,996,900</b>	

**Note:** State + Net Federal to not equal Total Medicaid Expenditures because Federal Taxes paid by Georgians are removed from Net Federal Expenditures

\* Half a fiscal year

IMPLAN uses a 440 sector input output model to measure the effects of three types of impacts: direct, indirect, and induced. Direct impacts consist of employment and purchases of goods and services in the region resulting from the activity being evaluated, in this case, healthcare services and services related to it. Indirect impacts, the result of inter-industry trade, consist of goods and services purchased by the firms, which supply inputs consumed in direct activity. Induced impacts consist of increased household purchases of goods and services in the region by persons employed by firms that have direct and indirect economic impacts. The model generates multipliers, which summarize the magnitude of the indirect and induced effects generated by a given direct change, to estimated changes in output, income, and employment. Most simply, the multiplier is the ratio of total impact to direct impact.

In the IMPLAN model, inter-industry relationships are classified based on data on the production functions of different industries in the region. The IMPLAN model was used to estimate the multipliers based on those coefficients for the state of Georgia as well as the counties that make up the 12 service delivery regions in the state. The model uses the allocated Medicaid spending to generate, total economic activity, total labor income, total employment, and total state and local tax revenue.

For this study, the geographic area considered first was the entire state of Georgia. Additionally, separate models were created for the 12 service delivery regions in the state. (See appendix table for the counties that make up each region.) For counties, no detailed Medicaid spending data were available. Thus, the distribution of Medicaid expenditures was assumed to be the same as in the state overall and the same industry sectors were used.

## RESULTS

The economic impact of the additional Medicaid spending on Georgia was estimated using total estimated new Medicaid expenditures of \$40.4 billion, generated from participation the Affordable Care Act from 2014-2023. Impacts of these additional Medicaid funds on, employment, labor income, value added and output are presented in Table 2A. The average multiplier, or the ratio of total to direct economic impact, was estimated to be 2.03 for output and 1.92 for employment. Total economic activity of \$8.177 billion was generated, on average annually, as a result of the new Medicaid spending. Accordingly, 70,343 full-time jobs in Georgia were attributable to the new Medicaid spending in an average year. Total labor income associated with these jobs was estimated to be \$3.558 billion with an average multiplier 1.68. Estimated labor income includes employee wages and salary, all benefits, as well as taxes such as the employer portion of Social Security and unemployment taxes.

**TABLE 2A: Georgia State Average Annual Economic Impact (in millions of 2012 dollars)**

IMPACT TYPE	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
Direct Effect	36,676	\$2,115.1	\$2,291.2	\$4,037.2
Indirect Effect	11,587	\$526.4	\$978.8	\$1,478.4
Induced Effect	22,079	\$916.3	\$1,683.5	\$2,661.5
<b>TOTAL EFFECT</b>	<b>70,343</b>	<b>\$3,557.7</b>	<b>\$4,953.5</b>	<b>\$8,177.1</b>

Table 2A only presents annual average employment, labor income, value added, and output. Using this table, it is straightforward to generate the 10-year total for the period under study, 2014-2023, for labor income, value added, and output, by simply summing each year's average annual value. For instance, for the 10 years under study, total output due to additional Medicaid spending in Georgia would be roughly \$80.2 billion. However, employment cannot be simply aggregated due to how IMPLAN treats additional sector expenditures. IMPLAN generally treats changes in industry spending as occurring on an annual basis. Therefore, the average annual additional Medicaid expenditures in Georgia of \$4.04 billion, allocated to the appropriate sectors, are used in the model. Since the additional Medicaid funds under the Affordable Care Act are exclusively federal, it is reasonable to treat the 70,343 jobs supported by this spending as jobs created in Georgia in the first year of that spending. However, to keep those jobs in the state, the model requires that at least that same amount be spent annually. Thus, in the period-evaluated 2014-2023, the 70,343 jobs would be the total amount of jobs created. The other three categories can be aggregated because as long as these newly created jobs exist, the average values in Table 2A of labor income, value added, and total output are created annually.

Table 3A lists the top-10 affected industry sectors by employment. This table lists the total economic impacts generated in an average year for all the firms, aggregated into industry sectors.

**TABLE 3A: The Top-10 Affected Industry Sectors By Employment (\$ amount in Millions)**

SECTOR	DESCRIPTION	EMPLOYMENT	OUTPUT
397	Private hospitals	15,154	\$1,926
394	Offices of physicians, dentists, and other health practitioners	9,511	\$1,186
395	Home health care services	9,500	\$557
396	Medical and diagnostic labs and other ambulatory care	3,959	\$540
360	Real estate establishments	3,190	\$463
413	Food services and drinking places	3,053	\$171
382	Employment services	2,491	\$89
336	Transit and ground passenger transportation	1,226	\$64
319	Wholesale trade businesses	954	\$163
388	Services to buildings and dwellings	910	\$55

Note, in an average year, 5 of the top-10 sectors for employment were for jobs generated through the indirect and induced economy wide effects. These sectors were: real estate establishments; food services and drinking places; employment services; wholesale trade businesses; and services to buildings and dwellings.

## TAXES

IMPLAN can also generate state and local tax collection estimates due to the new economic activity being modeled. These estimates should be viewed cautiously, as IMPLAN does not use tax rates, as of their 2010-year model data. Instead, state and local tax impacts are estimated based on an aggregate amounts collected for the tax, based on state or local data, and then apportioned based on either local income or consumption data. Because IMPLAN does not take into account the industry sector that is generating additional economic activity, the researcher must have knowledge of the relevant state and local tax structure to sensibly interpret the IMPLAN tax impact estimates.

**TABLE 4A: Estimated State and Local Average Annual Tax Collections (in millions of 2012 dollars)**

Local Tax collections	\$146.1
State Tax collections	\$130.5
<b>TOTAL STATE AND LOCAL TAX</b>	<b>\$276.5</b>

In this analysis, state and local taxes only include the indirect and induced economic impacts for state and local sales tax and local property tax. Many of the direct providers of medical services, such as hospitals, are generally exempt from paying sales tax. In addition, hospitals may be affiliated with religious or charitable organizations and be exempt from local property taxes. There is no such exemption at the state level for income taxes so the direct, indirect and induced effects are all included.

Table 4A shows state and local annual average estimated tax collections. Total annual average state and local tax collections are estimated to be \$276.5 million. Local tax collections are estimated to be on average \$146.1 million, annually. Local taxes include property tax collections and local option sales taxes, which are estimated at a rate of 3 percent. State tax collections are estimated to be approximately \$130.5 million annually. The majority of state tax revenue comes from income tax. Sales tax is the other large component of estimated state tax collections, estimated at a 4 percent rate. Note as a robustness check on the IMPLAN income tax estimates, the median and mean net tax liability for Georgia taxpayers from 2009 of \$575 and \$1,686 respectively was used to estimate income tax liability, given the new jobs created.<sup>3</sup> The median and mean net tax liabilities are multiplied by the total amount of jobs supported by the additional Medicaid spending in the state of 70,343. This yields a state annual income tax due of \$40.5 million to \$118.6 million. IMPLAN's estimate is \$70.1 million, which seems like a reasonable approximation given the range of potential tax collections using the median and mean value of net tax liability.

Table 4A shows the regional economic impact of the new Medicaid spending by Georgia Service Delivery Region. Regional shares of total regional economic impact are reported. For each region, a separate IMPLAN model was created. County level spending was aggregated to form region totals. IMPLAN runs the regional models independently and each region has different economic characteristics than the state in aggregate.

**TABLE 5A: Regional Share of Total Regional Average Annual Economic Impact (\$ in Millions)**

REGION	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
1 Northwest Georgia	6,201	\$283	\$1,926	\$677
2 Georgia Mountains	3,529	\$163	\$228	\$386
3 Atlanta Regional	25,926	\$1,537	\$2,146	\$3,364
4 Three Rivers	3,738	\$180	\$251	\$418
5 Northeast Georgia	4,043	\$178	\$253	\$431
6 Middle Georgia	4,211	\$195	\$274	\$462
7 Central Savannah River Area	3,843	\$182	\$251	\$428
8 River Valley	3,136	\$153	\$208	\$355
9 Heart of Georgia	3,127	\$130	\$176	\$319
10 Southwest Georgia	4,082	\$180	\$245	\$427
11 Southern Georgia	4,202	\$168	\$236	\$426
12 Coastal RC of Georgia	4,304	\$209	\$290	\$485
<b>Total Georgia</b>	<b>70,343</b>	<b>\$3,558</b>	<b>\$4,954</b>	<b>\$8,177</b>

<sup>3</sup> An Analysis of Options for Reforming Georgia's Income Tax: Simplicity, Equity, and Adequacy (Robert Bushman and David L. Sjoquist). FRC Report 240 (February 2012).

## APPENDIX B: Alternative Estimates

Estimates of the economic impact of Medicaid expansion in Georgia are contingent on three factors: 1) estimates of the number of new enrollees in the Medicaid program as a result of expansion; 2) the costs of medical care for those enrollees; and, 3) the state’s share of Medicaid expansion.

The estimates of the economic impact of Medicaid expansion presented in this report are scalable with respect to the first two factors. The estimates reported in this report were generated using Georgia specific models and historic costs. However, other analyses may produce different estimates of the enrollees and the annual cost per enrollee. If, for example, another analysis estimated that there would be more enrollees into Medicaid expansion and/or at higher per member annual costs so that the total net new Federal monies entering Georgia was 20 percent higher than the estimates presented in this study that would imply that the economic impact would also be 20 percent higher. In that case total economic activity generated by Medicaid expansion in Georgia would be about \$96 billion and would create about 84,000 jobs.

The Georgia Budget & Policy Institute has estimated that \$2.4 billion of the state expenditures attributed by DCH to Medicaid expansion are actually costs the state must bear under the Affordable Care Act even if Georgia opts not to expand Medicaid.<sup>4</sup> For example, included in these estimates are the costs of increased enrollment in the existing Medicaid program resulting from increased outreach and publicity surrounding the implementation of the Affordable Care Act. That woodwork effect, (“welcome mat”) is likely to occur even if the state opts not to expand the Medicaid program. Those increased state Medicaid expenditures will draw down Federal matching funds that should be excluded from an analysis of the economic impact of the expansion decision.

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**TABLE B1: Georgia Budget & Policy Institute’s estimate of Federal and State Medicaid expenditures resulting from solely Expansion Decision**

EXPANSION SPECIFIC ESTIMATES – STATE & FEDERAL FUNDS (\$ IN MILLIONS)	FY 2014–FY 2023
Newly Eligible Adults	\$32,667.6
Non–Emergency Transportation	\$529.7
<b>TOTAL COSTS (INCL FED \$) FOR EXPANSION AND CURRENT ELIGIBLES</b>	<b>\$33,197.3</b>

EXPANSION SPECIFIC COSTS – STATE FUNDS ONLY (\$ IN MILLIONS)	FY 2014–FY 2023
Newly Eligible Adults	\$2,084.3
Non–Emergency Transportation	\$63.4
<b>STATE FUNDS FOR EXPANSION AND CURRENT ELIGIBLES</b>	<b>\$2,147.7</b>

<sup>4</sup> Email communication with Timothy Sweeney, Director of Health Policy, Georgia Budget and Policy Institute

Using these estimates and netting out the Georgia taxpayer's share of Federal taxes, the estimates of economic impacts become:

**TABLE B2: Georgia State Average Annual Economic Impact under Alternative Assumption**  
(in millions of 2012 dollars)

IMPACT TYPE	EMPLOYMENT	LABOR INCOME	VALUE ADDED	OUTPUT
Direct Effect	29,332	1,692	1,832	3,229
Indirect Effect	9,267	421	783	1,182
Induced Effect	17,658	733	1,346	2,129
<b>TOTAL EFFECT</b>	<b>56,257</b>	<b>2,845</b>	<b>3,962</b>	<b>6,540</b>

**TABLE B3: Estimated State and Local Average Annual Tax Collections under Alternative Assumption**  
(in millions of 2012 dollars)

Local Tax collections	\$116.84
State Tax collections	\$104.37
<b>TOTAL STATE AND LOCAL TAX</b>	<b>\$221.21</b>

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