Economic Impacts of Extending Health Care Coverage in Florida

Sponsored Project Report to the Florida Hospital Association

By Alan W. Hodges, Ph.D. and Mohammad Rahmani, Ph.D.
University of Florida, Food & Resource Economics Department
PO Box 110240, Gainesville, FL
Email: awhodges@ufl.edu; telephone 352-294-7674

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Introduction

Health care is a major driver of economic activity in the United States, valued at $2.7 trillion in 2011, and representing approximately 17.9 percent of Gross Domestic Product (CMS, 2012). Activity in the health care sector has grown dramatically compared to other sectors of the economy, and serves as a source of economic development and job growth in many areas. Health care services are an important component of Florida's economy due to its rapidly growing and aging population.

The passage of the *Patient Protection and Affordable Care Act* (PPACA), signed into law by President Obama on March 23, 2010, constitutes the largest change to the American health care system since the advent of Medicare. The legislation is estimated to extend coverage to 32 million individuals at a cost of $940 billion over ten years, according to projections by the Congressional Budget Office. The law focuses on extending coverage, insurance market reforms, delivery system reforms, Medicare and Medicaid payment changes, wellness and prevention initiatives, quality and comparative effectiveness, workforce and graduate medical education and regulatory oversight and program integrity measures. Health care coverage will be extended to more Americans through the following mechanisms:

1. Mandates that almost all Americans purchase health insurance coverage.
2. Subsidies through tax credits and cost sharing assistance for individuals between 100 and 400 percent of the federal poverty level (FPL).
3. Subsidies for small businesses to offset the cost of providing health insurance coverage to employees.
4. Penalties assessed on businesses with 50 or more full-time equivalents if they do not provide coverage to their employees.

5. Coverage expansion of Medicaid to adults and children with incomes less than 138 percent of the FPL.

Each of these features will have impacts on the Florida economy. In particular, the extension of health care coverage under new FPL guidelines will have the largest impact. Costs associated with extending health care coverage will be covered initially by the federal government for the first three years, then 10 percent of costs will be covered by the states starting in 2017.

This report evaluates the broad economic impacts of projected changes in federal spending in Florida over the period 2013 through 2023.

Methods and Data

Revised projections of additional patient enrollment and spending in Florida based on extending health care coverage were released by the Florida Legislature's Office of Economic and Demographic Research Social Service Estimating Conference on March 7, 2013. The projections were provided for state and federal spending in Florida over the 10-year period of state fiscal years (July-June) 2012-13 through 2022-23. Enrollment of newly insured patients would increase to over 1 million persons within the first four years (Figure 1). The net increase in federal spending for healthcare extension (compared to without extension under current law) would total $51.32 billion over ten years, and average $5.13 billion annually (Table 1, Figure 2).

Economic impacts of extending health care coverage in Florida were estimated using a regional economic model for the state of Florida developed with the *IMPLAN* software (v.3) and associated state dataset for 2011 (MIG, Inc. 2012). This type of input-output/social accounting matrix model enables estimation of the secondary impacts of industry activities in the local economy arising from new final demand (Miller and Blair, 2009). The multipliers capture effects of input purchases or supply chain activity generated by the health care industry, and expenditures by households, local, state and federal governments, and capital investment generated by new resources garnered through federal government expenditures in Florida. The economic model for Florida was constructed using default parameters and trade flow assumptions, and all social accounts internalized. A glossary of economic impact analysis terminology is provided in the Appendix.

New federal spending based on extending health care coverage in Florida was applied to the existing mix of health care industry activity in the state in 2011. The total projected net federal expenditures were allocated to health care industry sectors based on their percentage of direct output as shown in Table 2. The largest industry sectors were offices of physicians, dentists and other health practitioners, representing 38.3 percent of total industry output, and private hospitals (31.9 percent), followed by nursing and residential care facilities (11.3 percent), medical and diagnostic labs (9.9 percent), home health care services (4.7 percent) and pharmaceutical manufacturing (3.9 percent). Increased total spending for each industry sector, by year, is detailed in Table 3 and charted in Figure 3.

Figure 1. Cumulative new patient enrollment based on extending health care coverage in Florida, 2013-14 to 2022-23

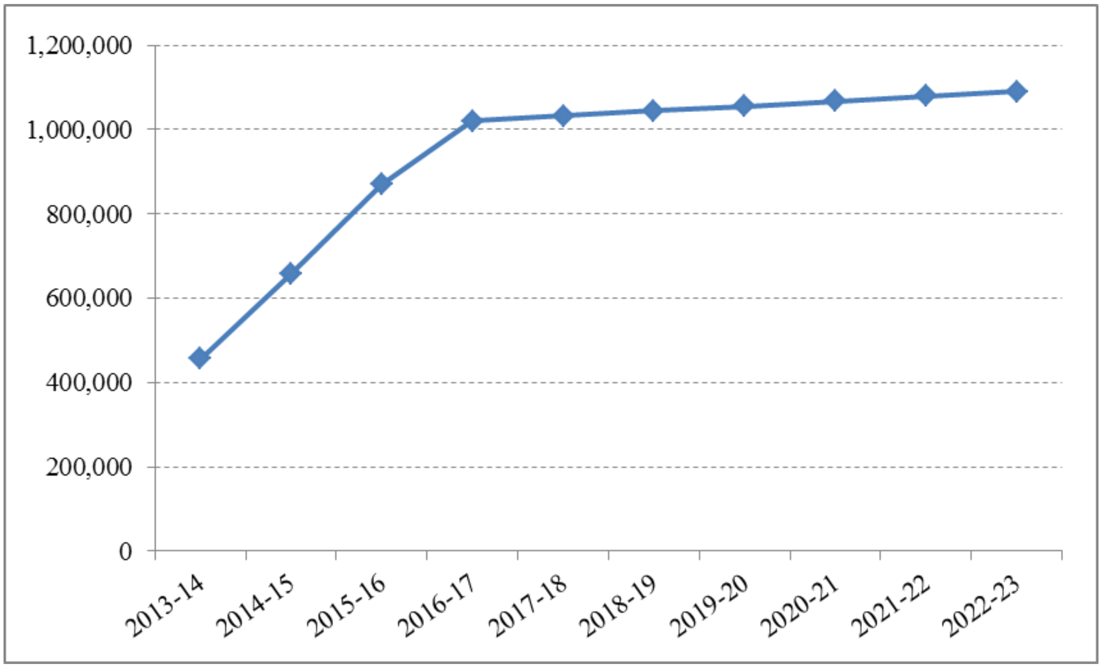


Figure 2. Increased federal spending based on extending health care coverage in Florida, 2013-14 to 2022-23

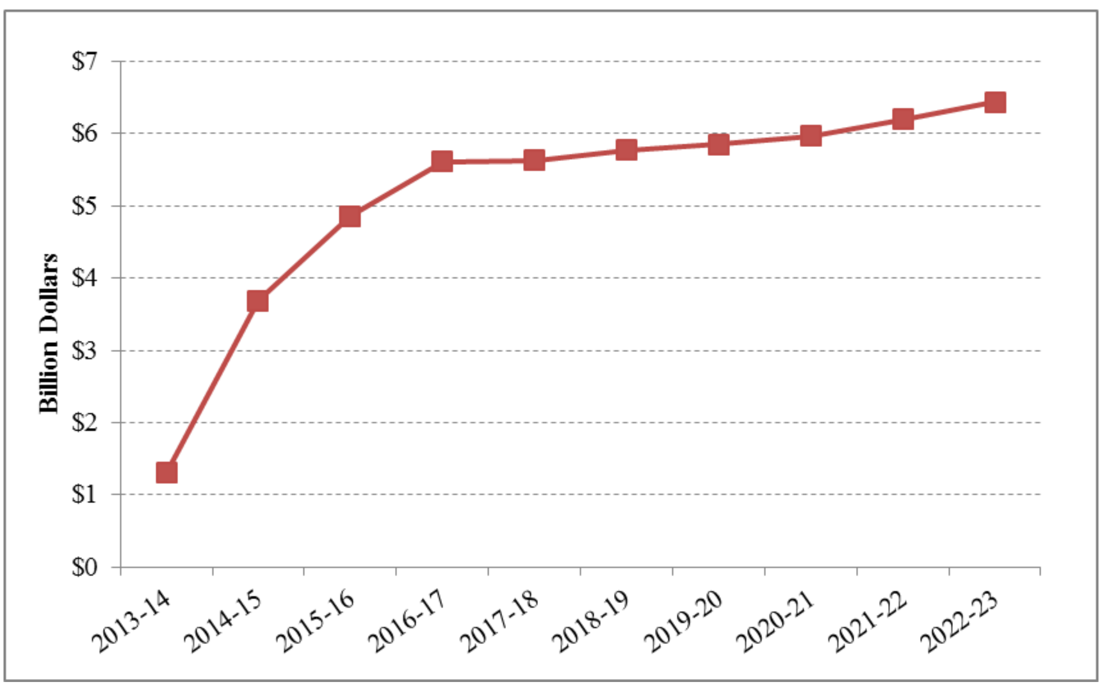


Table 1. Patient enrollment and spending changes for extending health care coverage in Florida, state fiscal years 2013-14 to 2022-23

	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Cumulative 2013-23	Average Annual
Enrollment (cumulative)	455,756	656,862	870,480	1,020,192	1,032,274	1,044,192	1,055,934	1,067,491	1,078,855	1,090,018		937,205
State Cost (M$)	$22.55	$116.53	$154.50	$315.18	$509.49	$593.06	$746.66	$877.82	$914.40	$953.02	$5,203.21	$520.32
Total Cost (M$)	$2,040.39	$4,336.83	$5,287.54	$6,251.77	$6,484.62	$6,724.28	$6,977.34	$7,244.62	$7,526.99	$7,825.39	$60,699.78	$6,069.98
Net Federal Cost (M$)	$1,303.59	$3,694.05	$4,859.33	$5,609.67	$5,631.71	$5,770.58	$5,851.91	$5,968.93	$6,194.61	$6,433.21	$51,317.60	$5,131.76

Total federal payments reflect total cost less state cost.
Values in millions dollars (M$).
Source: Florida Legislature, Office of Economic and Demographic Research (EDR), Social Service Estimating Conference, March 7, 2013.

Table 2. Health care industry sector data for Florida in 2011

Industry Sector	Employment (Jobs)	Employee Compensation (M$)	Total Value Added (M$)	Output (M$)	Percent of Total Output
Pharmaceutical preparation manufacturing	4,152	$303	$883	$3,951	3.94%
Offices of physicians, dentists, and other health practitioners	334,659	$20,654	$24,719	$38,468	38.32%
Home health care services	84,823	$2,895	$3,561	$4,712	4.69%
Medical and diagnostic labs and outpatient and other ambulatory care services	89,663	$3,889	$6,808	$9,885	9.85%
Private hospitals	252,867	$15,087	$17,257	$32,028	31.90%
Nursing and residential care facilities	192,651	$6,257	$7,546	$11,350	11.30%
Total	958,816	$49,086	$60,774	$100,395	100%

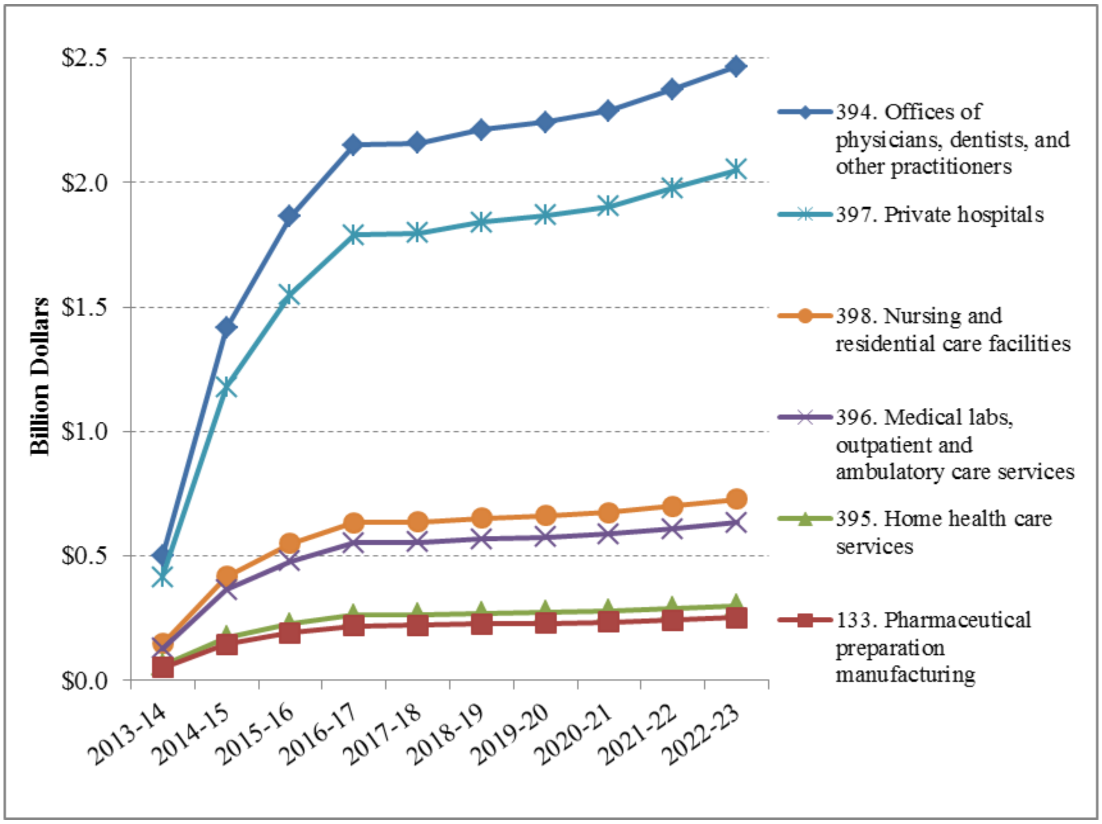
Source: *IMPLAN* (MIG, Inc., 2012).

Table 3. Increased net federal spending based on extending health care coverage in Florida, by health care industry sector, 2013-14 to 2022-23

Industry Sector	2013 -14	2014 -15	2015 -16	2016 -17	2017 -18	2018 -19	2019 -20	2020 -21	2021 -22	2022 -23	Cum. Total 2013-23	Avg. Annual
					million dollars							
Pharmaceutical preparation manufacturing	51	145	191	221	222	227	230	235	244	253	2,020	202
Offices of physicians, dentists, and other practitioners	499	1,415	1,862	2,149	2,158	2,211	2,242	2,287	2,374	2,465	19,663	1,966
Home health care services	61	173	228	263	264	271	275	280	291	302	2,409	241
Medical labs, outpatient and ambulatory care services	128	364	478	552	555	568	576	588	610	633	5,053	505
Private hospitals	416	1,178	1,550	1,790	1,797	1,841	1,867	1,904	1,976	2,052	16,372	1,637
Nursing and residential care facilities	147	418	549	634	637	652	662	675	700	727	5,801	580
Total All Sectors	1,304	3,694	4,859	5,610	5,632	5,771	5,852	5,969	6,195	6,433	51,318	5,132

Source: *IMPLAN* (MIG, Inc., 2012)

Figure 3. Chart of increased net federal spending based on extending health care coverage in Florida, by health care industry sector, 2013-14 to 2022-23



Results

The total economic impacts of projected net federal expenditures based on extending health care coverage in Florida are summarized in Table 4. Federal government expenditures in Florida over a ten-year period would generate $146.36 billion in industry output (revenues), $89.65 billion in value-added (Gross Domestic Product), $61.83 billion in labor income (employee wages, benefits, proprietor income), and employment impacts of 1,219,447 fulltime and part-time job-years. The cumulative employment impact represents an average of 121,945 ongoing permanent jobs, and the value added impact represents an average of $8.97 billion annually.

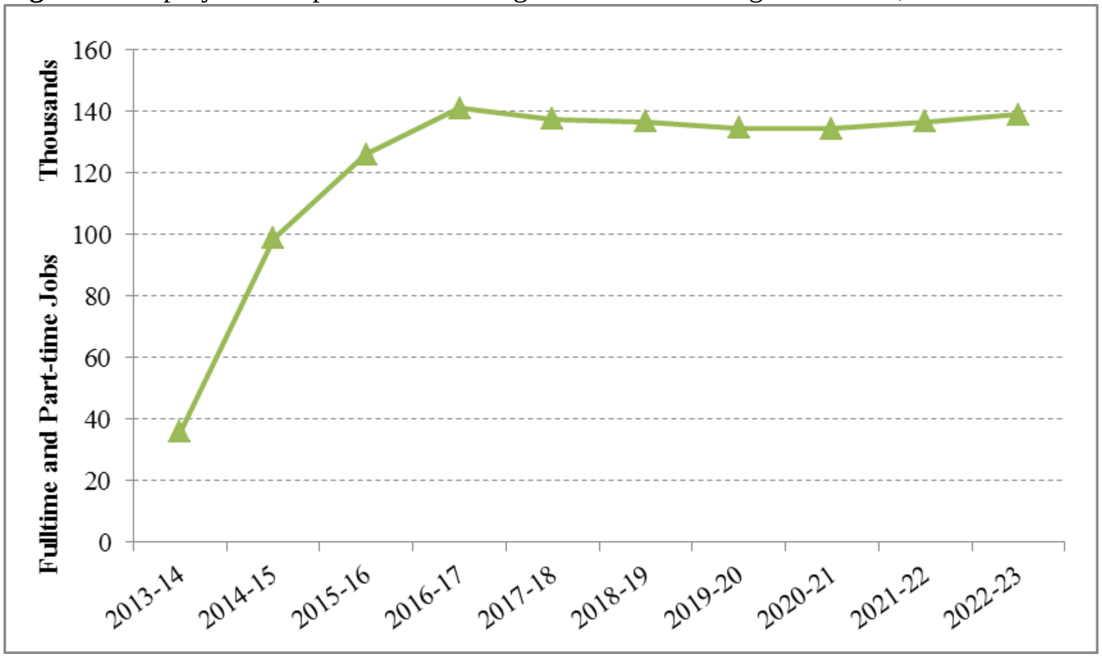
Table 4. Summary of total economic impacts of extending health care coverage in Florida, 2013-14 to 2022-23

Impact Type	Employment (Job-Years)	Labor Income (B$)	Value Added (B$)	Output (B$)
Direct Effect	386,868	$22.611	$25.381	$43.021
Indirect Effect	129,464	$5.664	$9.741	$15.969
Induced Effect	703,114	$33.553	$54.529	$87.369
Total Effect	1,219,447	$61.827	$89.651	$146.360
Average Annual over 10 years	121,945	$6.183	$8.965	$14.636

Employment represents fulltime and part-time jobs. Values in Billions 2013 dollars.
Estimates include regional multiplier effects. Average annual values reflect total amounts divided by 10 years.
Source: IMPLAN software (version 3) and Florida region data for 2011 (MIG, Inc. 2012).

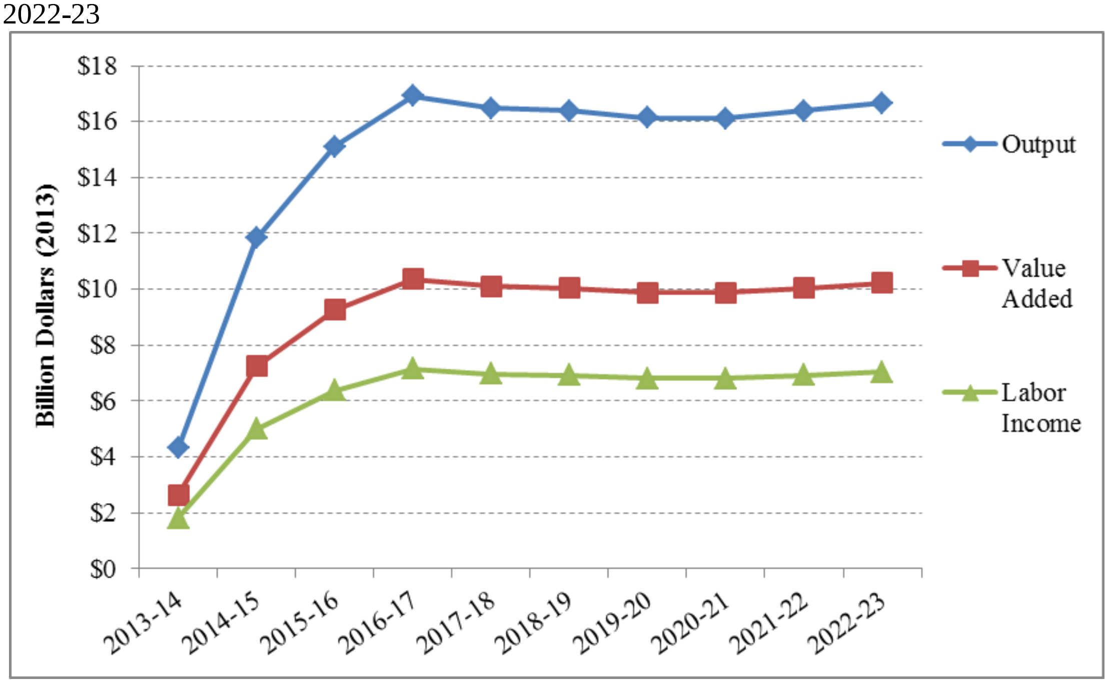
The trends in employment and monetary economic impacts of extending health care coverage in Florida during 2013-14 to 2022-23 are shown in Figures 4 and 5, respectively. In the peak year of 2016-17, total employment impacts would be 140,998 jobs and total value added impacts would be $10.37 billion.

Figure 4. Employment impacts of extending health care coverage in Florida, 2013-14 to 2022-23



Employment includes fulltime and part-time jobs. Estimates include regional multiplier effects.

Figure 5. Output, value added, and labor income impacts of extending health care coverage in Florida, 2013-14 to 2022-23



Impacts by Major Industry Groups

Economic impacts of extending health care coverage in Florida are summarized by major industry groups in Table 5. Naturally, the Health and Social Services sector generated the highest economic impacts for all measures, with average annual employment impacts of 49,494 jobs, and cumulative ten-year impacts of $52.19 billion in output, $31.64 billion in value added, and $29.33 billion in labor income. Other industry groups with large employment impacts (average annual jobs) included Retail Trade (9,985 jobs), Government (8,619 jobs), Administrative and Waste Services (7,798 jobs), Professional, Scientific and Technical Services (6,412 jobs), Real Estate and Rentals (6,140 job), and Finance and Insurance (5,787 jobs).

Table 5. Economic impacts of extending health care coverage in Florida by major industry groups, 2013-14 to 2022-23

Industry Group (NAICS)	Average Annual Employment (Jobs)	Labor Income (M$)	Value Added (M$)	Output (M$)
11. Agriculture, Forestry, Fishing & Hunting	369	$117	$186	$375
21. Mining	108	$14	$33	$273
22. Utilities	233	$273	$1,053	$1,862
23. Construction	3,581	$1,715	$2,000	$3,900
31-33. Manufacturing	1,321	$855	$1,694	$6,391
42. Wholesale Trade	2,486	$1,867	$3,267	$4,421
44-45. Retail Trade	9,985	$3,243	$5,068	$7,095
48-49. Transportation & Warehousing	2,084	$939	$1,290	$2,678
51. Information	1,417	$1,131	$2,507	$5,188
52. Finance & Insurance	5,787	$3,058	$6,041	$12,054
53. Real Estate & Rental	6,140	$978	$11,263	$16,444
54. Professional, Scientific & Technical Services	6,412	$4,092	$5,326	$7,830
55. Management of Companies	794	$782	$902	$1,584
56. Administrative & Waste Services	7,798	$2,464	$2,918	$4,555
61. Educational Services	1,787	$624	$708	$1,127
62. Health & Social Services	49,494	$28,330	$31,643	$52,194
71. Arts, Entertainment & Recreation	1,787	$551	$837	$1,320
72. Accommodation & Food Services	6,675	$1,642	$2,369	$4,234
81. Other Services	5,067	$1,917	$2,140	$3,512
92. Government & Non-NAICS	8,619	$7,235	$8,405	$9,322
Total All Sectors	121,945	$61,827	$89,651	$146,360

Employment represents fulltime and part-time jobs. Values in Millions 2013 dollars.
Industries classified according to the North American Industry Classification System (NAICS).
Estimates include regional multiplier effects. Average annual employment reflects total job-years divided by 10 years.
Source: IMPLAN software (version 3) and Florida region data for 2011 (MIG, Inc. 2012).

Federal and State/local Tax Impacts

Extending health care coverage in Florida would generate a total of $5.41 billion in tax income for local and state governments in Florida over a ten-year period, or an average of $541 million a year, and would also generate $12.45 billion in federal tax during the period. The largest annualized local and state tax revenues would come from business property tax ($330 M), and sales tax ($126 M).

Table 6. Tax impacts of extending health care coverage in Florida, 2013-14 to 2022-23

Tax Item	Average Annual Amount (M$)	Total Amount Over Ten Years (M$)
Dividends	$0.53	$5.26
Social Ins. Tax- Employee Contribution	$1.66	$16.59
Social Ins. Tax- Employer Contribution	$2.94	$29.40
Business Sales Tax	$126.21	$1,262.07
Business Property Tax	$329.79	$3,297.87
Business Motor Vehicle Licenses	$1.55	$15.46
Business Other Taxes	$19.87	$198.69
Business State/Local Non Taxes	$29.47	$294.65
Corporate Profits Tax	$7.52	$75.17
Personal Income Tax	$0.00	$0.00
Personal Non-Taxes (Fines, Fees)	$14.98	$149.80
Personal Motor Vehicle License	$1.72	$17.22
Personal Property Taxes	$3.87	$38.72
Personal Other Tax (Fish/Hunt)	$0.66	$6.59
Total State and Local Tax	**$540.75**	**$5,407.49**
Social Ins. Tax- Employee Contribution	$278.31	$2,783.10
Social Ins. Tax- Employer Contribution	$329.42	$3,294.23
Business Excise Taxes	$41.34	$413.44
Business Custom Duty	$17.45	$174.45
Corporate Profits Tax	$142.01	$1,420.10
Personal Income Tax	$436.21	$4,362.12
Total Federal Tax	**$1,244.74**	**$12,447.45**

Values in Millions 2013 dollars.
Estimates include regional multiplier effects.
Source: IMPLAN software and Florida region data for 2011 (MIG, Inc. 2012).

Employment Impacts by County

The employment impacts of extending health care coverage in Florida are detailed by county in Table 7. These county-level impacts were estimated assuming that new federal spending for extending coverage will accrue to individual counties in proportion to their share of the overall statewide population without private or public health insurance coverage. Data on the uninsured population under 65 years of age were taken from the U.S. Census Bureau, American Community Survey, three-year estimates for 2009-11. The estimated average annual statewide employment impact of extending coverage (121,945 jobs) was allocated to each of the states' 67 counties based on its percentage share of the total state uninsured population. Employment impacts of extending health care coverage would be highest in the large metropolitan counties of Miami-Dade (23,655 jobs), Broward (12,665 jobs), Palm Beach (8,455 jobs), Orange (8,019 jobs) and Hillsborough (7,377 jobs).

Table 7**.** Employment impacts of extending health care coverage in Florida counties

County	Uninsured Population Under 65 Years Of Age	Percent Of Total State Uninsured Population	Average Annual Employment Impact (Jobs)
Alachua	37,504	0.973%	1,186
Baker	4,074	0.106%	129
Bay	32,547	0.844%	1,029
Bradford	4,429	0.115%	140
Brevard	89,640	2.325%	2,835
Broward	400,420	10.386%	12,665
Calhoun	2,874	0.075%	90
Charlotte	25,738	0.668%	814
Citrus	23,652	0.613%	748
Clay	25,689	0.666%	813
Collier	75,937	1.970%	2,402
Columbia	11,867	0.308%	375
De Soto	9,601	0.249%	304
Dixie	3,199	0.083%	90
Duval	146,010	3.787%	4,618
Escambia	51,177	1.327%	1,619
Flagler	15,630	0.405%	494
Franklin	2,263	0.059%	90
Gadsden	8,734	0.227%	276
Gilchrist	3,326	0.086%	90
Glades	2,487	0.065%	90
Gulf	3,122	0.081%	90
Hamilton	2,912	0.076%	90
Hardee	7,922	0.205%	251
Hendry	12,650	0.328%	400
Hernando	30,654	0.795%	970
Highlands	18,296	0.475%	579
Hillsborough	233,225	6.049%	7,377

County	Uninsured Population Under 65 Years Of Age	Percent Of Total State Uninsured Population	Average Annual Employment Impact (Jobs)
Holms	3,923	0.102%	90
Indian River	27,308	0.708%	864
Jackson	6,570	0.170%	208
Jefferson	2,842	0.074%	90
Lafayette	1,700	0.044%	90
Lake	47,799	1.240%	1,512
Lee	131,524	3.411%	4,160
Leon	36,371	0.943%	1,150
Levy	8,077	0.209%	255
Liberty	1,672	0.043%	90
Madison	3,774	0.098%	90
Manatee	62,231	1.614%	1,968
Marion	60,987	1.582%	1,929
Martin	24,110	0.625%	763
Miami-Dade	747,897	19.398%	23,655
Monroe	21,256	0.551%	672
Nassau	12,643	0.328%	400
Okaloosa	28,174	0.731%	891
Okeechobee	8,780	0.228%	278
Orange	253,516	6.576%	8,019
Osceola	65,232	1.692%	2,063
Palm Beach	267,309	6.933%	8,455
Pasco	78,706	2.041%	2,489
Pinellas	162,041	4.203%	5,125
Polk	110,601	2.869%	3,498
Putnam	15,921	0.413%	504
St. Johns	24,811	0.644%	785
St. Lucie	61,159	1.586%	1,934
Santa Rosa	22,655	0.588%	717
Sarasota	64,999	1.686%	2,056
Seminole	73,562	1.908%	2,327
Sumter	8,698	0.226%	275
Suwannee	8,187	0.212%	259
Taylor	3,896	0.101%	123
Union	3,044	0.079%	90
Volusia	92,266	2.393%	2,918
Wakulla	2,857	0.074%	90
Walton	8,612	0.223%	272
Washington	4,154	0.108%	131
State Total	3,855,444	100%	121,945

Sources: IMPLAN software and 2011 Florida state data (MIG, Inc. 2012); U.S. Census Bureau, American Community Survey 3-Year Estimates for 2009-11, Health Insurance Coverage Status by Sex and Age (dataset B27001); University of Florida, Bureau of Economic and Business Research, Florida county population, 2010.

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Appendix: Glossary of Economic Impact Terms

Terms are presented in a logical order rather than alphabetically

Region defines the geographic area for which impacts are estimated. Regions are generally an aggregation of one or more counties. Economic regions identified in this paper were defined based on worker commuting patterns.

Sector is a grouping of industries that produce similar products or services, or production processes. Most economic reporting and models in the U.S. are based on the North American Industrial Classification System (NAICS).

Impact analysis estimates the impact of changes in a regional economy resulting from a change in final demand or direct employment to industries, and changes in household income.

Input-output (I-O) model. An input-output model is a representation of the flows of economic activity between industry sectors within a region. The model captures what each business or sector must purchase from every other sector in order to produce its output of goods or services. Using such a model, flows of economic activity associated with any change in spending may be traced backwards (e.g., purchases of plants that leads growers to purchase additional inputs -- fertilizers, containers, etc.). Multipliers for a region may be derived from an input-output model of the region's economy.

IMPLAN is a micro-computer-based input-output modeling system and Social Accounting Matrix (SAM). With IMPLAN, one can estimate models for any region consisting of one or more counties. IMPLAN includes procedures for generating multipliers and estimating impacts by applying final demand changes to the model. The current version of the software is *IMPLAN* version three.

Direct effects are the changes in economic activity during the first round of spending. **Secondary effects** are the changes in economic activity from subsequent rounds of re-spending. There are two types of secondary effects: **Indirect effects** are the changes in sales, income or employment within the region in backward-linked industries supplying goods and services to businesses. For example, the increased sales in input supply firms resulting from more nursery industry sales is an indirect effect. **Induced effects** are the increased sales within the region from household spending of the income earned in the direct and supporting industries. Employees in the direct and supporting industries spend the income they earn on housing, utilities, groceries, and other consumer goods and services. This generates sales, income and employment throughout the region's economy. **Total effects** are the sum of direct, indirect and induced effects.

Multipliers capture the total effects, both direct and secondary, in a given region, generally as a ratio of the total change in economic activity in the region relative to the direct change**.** Multipliers may be expressed as ratios of sales, income or employment, or as ratios of total income or employment changes relative to direct sales. Multipliers express the degree of interdependency between sectors in a region's economy and therefore vary considerably across regions and sectors. **Type I** multipliers include only direct and indirect effects. **Type II** multipliers also include induced effects. **Type SAM** multipliers used by IMPLAN additionally account for capital investments and transfer payments such as welfare and retirement income. A **sector-specific multiplier** gives the total changes to the economy associated with a unit change in output or employment in a given sector**.**

Purchaser prices are the prices paid by the final consumer of a good or service. **Producer prices** are the prices of goods at the factory or production point. For manufactured goods the purchaser price equals the producer price plus a retail margin, a wholesale margin, and a transportation margin. For services, the producer and purchaser prices are equivalent.

Margins. The retail, wholesale and transportation margins are the portions of the purchaser price accruing to the retailer, wholesaler, and grower, respectively. Only the retail margins of many goods purchased by consumers accrue to the local region, as the wholesaler, shipper, and manufacturer often lie outside the local area.

Measures of economic activity. Sales or output is the dollar volume of a good or service produced or sold. **Final Demand** is sales to final consumers, including households, governments, and exports. **Intermediate sales** are sales to other industrial sectors. **Income** is the money earned within the region from production and sales. Total income includes personal income (wage and salary income, including income of sole proprietor's profits and rents). **Jobs** or employment is a measure of the number of jobs required to produce a given volume of sales/production, usually expressed as full time equivalents, or as the total number including part time and seasonal positions. **Value Added** is the sum of total income and indirect business taxes. Value added is the most commonly used measure of the contribution of a region to the national economy, as it avoids double counting of intermediate sales and captures only the “value added” by the region to final products.