

# **The Economic Impact of SoonerCare on Oklahoma's Economy**

Prepared for:  
The Oklahoma Hospital Association  
and  
The Oklahoma Association of Health Care Providers

Data Provided by:  
Oklahoma Health Care Authority  
SoonerCare of Oklahoma (Oklahoma's Medicaid Program)

Prepared by:  
National Center for Rural Health Works  
Oklahoma State University  
Oklahoma Cooperative Extension Service

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SoonerCare, the Medicaid program in Oklahoma, is known to have a significant impact on the lives of eligible Oklahoma participants who utilize SoonerCare program services. SoonerCare participants rely on SoonerCare of Oklahoma's ability to provide medical services to these more vulnerable citizens, which are mainly poor elderly, disabled, pregnant women and children. What is not well known is the huge economic impact SoonerCare has on Oklahoma's economy. The overall objective of this report is to estimate the economic impact of SoonerCare on Oklahoma's economy and to estimate the economic impact of proposed reductions in SoonerCare on Oklahoma's economy. More specifically, the report will:

1. Provide an overview of SoonerCare participation and a summary of Oklahoma's SoonerCare spending;
2. Estimate the economic impact of program services provided by SoonerCare to the citizens of Oklahoma;
3. Estimate the economic impact of the administrative employees and contractors of SoonerCare;
4. Estimate the impact of SoonerCare on state sales taxes, state income taxes, and selected "other" state taxes;
5. Summarize the total economic impacts and tax impacts SoonerCare had on Oklahoma's economy during the State Fiscal Year 2010 (July 2009 through June 2010) (SFY 2010); and
6. Estimate the impact of reductions in state and federal funding of SoonerCare on Oklahoma's economy.

In order to calculate the economic impacts noted above, a widely-accepted input-output model known as IMPLAN was utilized to estimate the direct, secondary, and total impacts of SoonerCare on Oklahoma's economy. The economic impact in this report will be quantified as employment, income, and output resulting from SoonerCare. Information on the model and data

used in this report can be found in **Appendix A**. Employment is defined as full-time equivalent employees. Income is defined as personal income from wages and salaries, proprietors' income, and benefits. Output is defined as total expenditures of a business, industry or organization; i.e., SoonerCare of Oklahoma. Income is part of output; in other words, expenditures for wages and salaries, proprietors' income, and benefits (income) are a part of the total expenditures (output) of an organization; i.e., SoonerCare of Oklahoma. Therefore, the impacts for income and output cannot be combined. Income is part of total output. Taxes generated by SoonerCare of Oklahoma include state sales, state income, and selected "other" state taxes.

## Overview of SoonerCare

The Oklahoma Health Care Authority (OHCA) has responsibility for SoonerCare, the Oklahoma Medicaid program, and administers the Insure Oklahoma program, which is funded by Oklahoma's tobacco tax revenues. For both programs, state expenditures are matched approximately two to one by the federal government. Insure Oklahoma has two components: Employer Sponsored Insurance (ESI), which is a health coverage subsidy to help small business owners provide health insurance to their low to moderate income employees and their spouses, and the Individual Plan (IP), which is available for Oklahoma residents between the ages of 19 and 64 who are self-employed, temporarily unemployed, or working disabled.

Highlights of SoonerCare from the SFY 2010 Annual Report of the Oklahoma Health Care Authority are illustrated in three areas: 1) Members, 2) Expenditures, and 3) Administration.

### ***Members***

- There were 885,238 unduplicated members enrolled in either SoonerCare (Oklahoma Medicaid) or Insure Oklahoma during SFY 2010 (July 2009 through June 2010).
- A total of 881,220 Oklahoma SoonerCare members received services during SFY 2010.
- Overall SoonerCare enrollment increased by 7.3 percent and the number served increased 8.9 percent from SFY 2009. Enrollment increases are generally tied to economic downturns.
- Enrollment in the Insure Oklahoma program has increased 48 percent since June 2009. As of June 2010, 31,860 enrollees and 5,496 businesses were participating.
- During SFY 2010, Oklahoma provided coverage to 39,479 SoonerPlan (Oklahoma's Free Family Planning Program) enrollees and 6,522 women needing further diagnosis or treatment for breast and/or cervical cancer through the Oklahoma Cares program.
- SoonerCare covers approximately 64 percent of the births in Oklahoma. Calendar year 2009 SoonerCare deliveries were 33,898 of the 52,279 overall state births (OSDH preliminary figures accessed 4/28/2010).

**Expenditures**

- An average of 18 percent of SoonerCare members were aged, blind and disabled enrollees. These enrollees accounted for 53 percent of the SoonerCare expenditures in SFY 2010 (**Table 1**).
- SoonerCare funded 69 percent of Oklahoma’s total nursing home occupied bed days.
- Nursing home facilities are assessed a Quality of Care fee that provides the state portion of Medicaid funds to garner federal matching totaling \$50,911,789 to improve the quality of care received by nursing home residents in nursing facilities.
- Dollars recovered by OHCA through post-payment reviews totaled \$18,047,254.
- Drug rebate collections totaled \$134,415,691.
- By limiting the amount paid for generic drugs, OHCA saved more than \$75.7 million through the State Maximum Allowable Cost program.

**Table 1** illustrates the enrollees in the program as a percent of total enrollees and shows the percent of total expenditures by each enrollment group; age groups are also illustrated as a percent of enrollees and as a percent of expenditures. Data in **Table 1** indicated that 60 percent of those enrolled in SoonerCare were children age 18 and under; this age group accounted for

**Table 1**  
**Oklahoma SoonerCare Enrollees and Expenditures by Age**  
**SFY 2010**

Groups	Percent of Enrollees	Percent of Expenditures
<b>Enrollment Groups</b>		
Aged, Blind, Disabled	18.0%	53.1%
Children/Parents	69.0%	36.7%
Insure Oklahoma	5.0%	2.2%
SoonerPlan	4.3%	0.2%
Other	<u>3.7%</u>	<u>7.8%</u>
	<b><u>100.0%</u></b>	<b><u>100.0%</u></b>
<b>Age Groups</b>		
Non-Age Specific	0.0%	7.7%
Adults 65 years and over	7.4%	18.6%
Adults 19 years to 64 years	32.6%	41.3%
Children 18 and under	<u>60.0%</u>	<u>32.4%</u>
	<b><u>100.0%</u></b>	<b><u>100.0%</u></b>

Source: Oklahoma Health Care Authority, Annual Report State Fiscal Year 2010.

32.4 percent of SoonerCare expenditures. The adults over 18 made up 40 percent of the total SoonerCare enrollment and accounted for nearly 60 percent of the total SoonerCare expenditures.

***Administration***

- OHCA processed 53 emergency rules, 46 permanent rules, and 33 State Plan amendments.
- There were 180 group provider training sessions attended by more than 11,640 providers. OHCA and HP held 4,043 individual on-site provider training sessions during SFY 2010. (HP is OHCA's fiscal agent; HP processes claims and payments within Oklahoma's Medicaid Management Information System [MMIS].)
- OHCA received and investigated 1,291 SoonerCare member complaints. This represents less than 1 percent of the 885,238 SoonerCare enrollees.
- There were 49 provider and 158 member formal appeals filed. This is less than one-fourth of 1 percent of both populations.
- OHCA administrative costs comprised 2.44 percent of the total SoonerCare expenditures. OHCA operating costs represented 41 percent of OHCA administrative costs, and the other 59 percent were contract costs.

## Summary of SoonerCare Funding in SFY 2010

Federal and state revenues for SoonerCare of Oklahoma for SFY 2010 are presented in **Table 2**, based on data from OHCA. Several important facts are illustrated in the data. In SFY 2010, total SoonerCare revenues in Oklahoma equaled over \$4.4 billion. **Of the total, \$3.1 billion were federal funds and \$1.3 billion were state funds.** The \$3.1 billion federal funds included the regular federal match of \$2.8 billion and the federal stimulus funds of \$0.4 billion. State funds included OHCA state funds of \$549.3 million and other state agency funds for program services of \$236.3 million, for a total of state general funds of about \$785.5 million. The other revenues of \$524.2 million are from drug rebates, medical refunds, tobacco tax funds, carryover funds from the previous year, etc.

Of the total SoonerCare revenues, 71 percent were federal dollars and 29 percent were state funds. However, since the federal stimulus funds are not guaranteed annually, the percentages of federal and state revenues were calculated without the federal stimulus funds. This results in SoonerCare receiving 68 percent of revenues from federal dollars and receiving 32 percent of revenues from state dollars. Another way to illustrate this is that for every SoonerCare dollar of revenue, 68¢ are from federal funds and 32¢ are from state funds. An additional way of stating this relationship is that for every \$1.00 of revenue from Oklahoma state funds for SoonerCare, the federal government contributed \$2.08 in revenues.

Of the total revenues received for SoonerCare during SFY 2010 of just over \$4.4 billion, actual funds expended during SFY 2010 were just over \$4.3 billion. The difference between the amount of revenues received and the amount of funds expended was \$85.1 million, which are carryover funds into the next fiscal year. This carryover occurs each year in varying amounts.



**Table 2**  
**Oklahoma SoonerCare Revenues by Source of Funds and Type of Expenditure**  
**and Expenditures by Type, SFY 2010**

Source	Totals	Percent
<b>OHCA SoonerCare Revenues by Source of Funds</b>		
Federal	\$2,728,040,767	61.2%
Federal Stimulus Funds	\$421,111,338	9.4%
OHCA State Funds	\$549,272,707	12.3%
Other State Agency Funds for Program Services	\$236,261,568	5.3%
Other Revenue (Drug rebates, medical refunds, tobacco tax funds, carryover funds from previous year, etc.)	<u>\$524,166,315</u>	<u>11.8%</u>
<b>Total OHCA Funds</b>	<b>\$4,458,852,695</b>	<b><u>100.0%</u></b>
<b>Less Carryover funds for next fiscal year</b>	<b><u>\$85,069,995</u></b>	
<b>Total OHCA Funds Expended SFY 2010</b>	<b><u>\$4,373,782,700</u></b>	
<b>Total SoonerCare Spending by Type of Expenditures</b>		
Expenditures for OHCA Program Services	\$4,252,425,104	94.5%
Expenditures for OHCA Administrative Services	<u>\$121,357,596</u>	<u>2.7%</u>
<b>Total OHCA Funds Expenditures SFY 2010</b>	<b><u>\$4,373,782,700</u></b>	<b><u>97.2%</u></b>
Other State Agency Spending for Administration of SoonerCare*	<u>\$124,117,003</u>	<u>2.8%</u>
<b>Total SoonerCare Expenditures SFY 2010</b>	<b><u>\$4,497,899,703</u></b>	<b><u>100.0%</u></b>

Source: Financial data received from Oklahoma Health Care Authority, December 2010.

\* Other state agencies providing administration of SoonerCare Program include Oklahoma Department of Human Services, Oklahoma Office of Juvenile Affairs, Oklahoma Department of Mental Health and Substance Abuse Services, and Oklahoma State Department of Health.

The second half of **Table 2** illustrates the expenditures for program services of almost \$4.4 billion from the OHCA revenues, as well as expenditures at other state agencies for administration of SoonerCare. OHCA expended almost \$4.3 billion on program services and an additional \$121.4 million on administration of SoonerCare. Four other state agencies also provided administrative services for SoonerCare; these are Oklahoma Department of Human Services, Oklahoma Office of Juvenile Affairs, Oklahoma Department of Mental Health

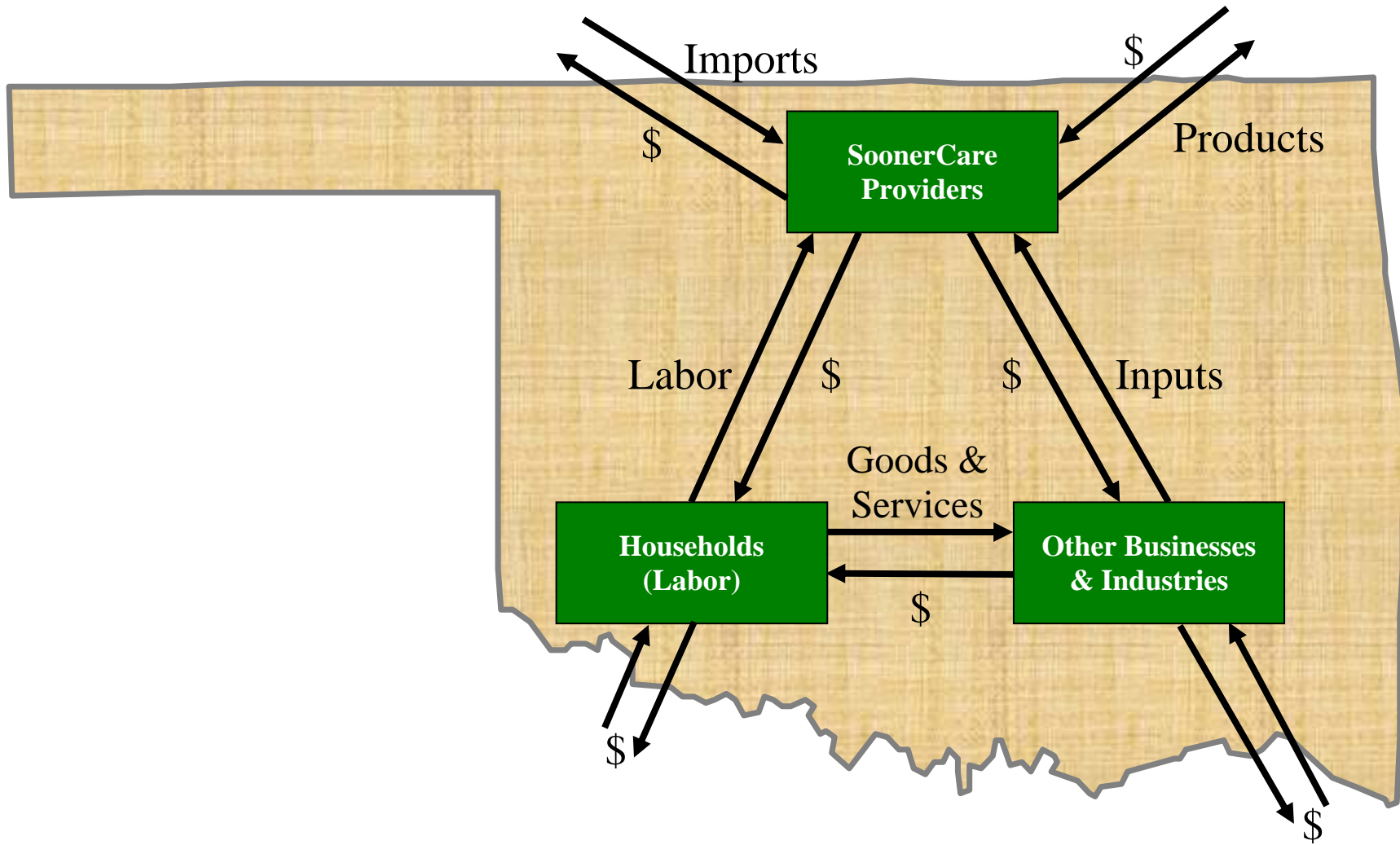
and Substance Abuse Services, and Oklahoma State Department of Health. The funds expended by these four agencies totaled \$124.1 million. In summary, OHCA expended a total of nearly \$4.4 billion for SoonerCare and the other state agencies expended \$124.1 million, which brings total SoonerCare expenditures up to almost \$4.5 billion in SFY 2010. The total COMBINED administrative costs were \$245.5 million, representing only 5.5 percent of total program expenditures. The remaining 94.5 percent of expenditures were for actual program services through OHCA.

## **Model to Estimate the Total Impact of SoonerCare of Oklahoma**

SoonerCare expenditures pay directly for the delivery of program services to the eligible recipients and for the administration costs at the OHCA. The administrative costs at the other state agencies are paid by those state agencies. As the providers of the program services and the administrative services spend money for goods and services, additional employment, income, and output are created in other businesses and industries. The additional employment, income, and output can be calculated with an input-output model and IMPLAN data. Again, the model and data are further explained in **Appendix A**.

The concept is depicted in **Figure 1**, which illustrates the major flow of goods, services, and dollars in Oklahoma's economy relative to SoonerCare. SoonerCare administers the program and purchases medical services from health care providers in Oklahoma. Likewise, the health care providers paid for by SoonerCare purchase goods and services from other businesses and industries and purchase labor from households. This is depicted in **Figure 1** as labor is hired by the providers and dollars are paid to the households in the form of wages, salaries, and benefits. Households, in turn, buy goods and services and create jobs and income in other businesses. Inputs are the goods and services that are purchased from other businesses and industries within the state.

Imports are goods and services or labor purchased outside of the state. The imports on **Figure 1** reflect goods and services or labor purchased outside of Oklahoma. Whenever goods and services or labor are purchased outside of the state, those dollars do not impact Oklahoma's economy.



**Figure 1**  
**Flow of Goods, Services, and Dollars in Oklahoma's Economy**  
**relative to SoonerCare of Oklahoma**

Consider, for instance, the closing of a hospital or a nursing home. When a hospital or nursing home closes, it will no longer pay employees and income (dollars) going to households will stop. Likewise, the hospital or nursing home will not purchase goods from other businesses and the dollar flow to other businesses will stop. This decreases income in the "households" segment of the economy. Since household income would decrease, households decrease their purchases of goods and services from businesses within the "services" segment of the economy. This, in turn, decreases these businesses' purchases of labor and inputs. Thus, the change in the economic base works its way throughout the entire economy.

The total impact of a change in the economy consists of direct and secondary impacts. Direct impacts are the changes in the activities (i.e. jobs, income, and business spending) of the impacting industry or business; in this example, the closing of a hospital or nursing home. The impacting business, such as the hospital or nursing home, changes its purchases of inputs as a result of the direct impact. This produces an "indirect impact" in the business sectors. Both the direct and indirect impacts change the flow of dollars to the state's households. The households alter their consumption accordingly. The effect of this change in household consumption upon businesses in the state is referred to as an "induced impact." The combination of the indirect and induced impacts is the secondary impact.

A measure is needed that will yield the effects created by an increase or decrease in economic activity. In economics, this measure is called the "multiplier effect." The multipliers can measure employment, income, and output shifts created by any economic change (such as SoonerCare). The health employment multiplier indicates the total employment change throughout the economy of Oklahoma for each employment change in the health sector. The health income multiplier indicates the total change in income (dollars) throughout the economy

due to a one dollar change in income in the health sector. The output multiplier indicates the total change in expenditures throughout the economy of Oklahoma for each dollar of expenditures from SoonerCare.

For example, an income multiplier for the health sector of 1.5 indicates that if one dollar of income changes (increases or decreases) in the health sector, then an additional 50¢ of income changes (increases or decreases) in other sectors in the economy due to the spending of the businesses and households in the health care sector. An employment multiplier for the health sector of 1.75 indicates that if one job changes (increases or decreases) in the health sector, an additional 0.75 jobs change (increase or decrease) in other sectors in the economy due to the spending of the businesses and households in the health care sector. An output multiplier for the health sector of 2.04 indicates that if total expenditures change (increase or decrease) by one dollar, then an additional \$1.04 change (increase or decrease) in expenditures will occur in other sectors in the economy due to the spending of the businesses and households in the health care sector.

### **Direct Economic Impact of SoonerCare, SFY 2010**

The direct impacts from employment, income, and output will be illustrated for SoonerCare of Oklahoma. This section illustrates the calculations of the direct impacts of administrative services and program services and the combined totals.

The administrative services of SoonerCare create an economic impact on the economy of Oklahoma. Direct employment, income, and output from the administrative services of SoonerCare are presented in the upper portion of **Table 3**. The OHCA provided their direct employment of 471 full-time equivalent administrative employees in SFY 2010 with direct income of \$29.4 million. In addition, the administrative services from the other state agencies were estimated to generate an additional 482 direct full-time equivalent administrative employees with direct income of \$30.1 million. These estimates were based on similar ratios of administrative employment to total administrative expenditures of the OHCA and based on average income per employee of the OHCA. The administrative employees from these other state agencies perform functions including provider enrollment and claims payment, utilization management, and third-party recovery. The combined totals for administrative services were 953 direct full-time equivalent employees, direct income of \$59.5 million, and total direct expenditures of \$245.5 million.

OHCA provided the total direct expenditures for each of the program service categories listed in the lower portion of **Table 3**. From the total direct expenditures for each program service category, the direct employment and direct income were estimated. These were estimated by utilizing ratios of employment to each million dollars of total expenditures (output) from the IMPLAN model. After estimating direct employment, direct income was estimated by applying the average income for each particular category of expenditures.

**Table 3**  
**Oklahoma SoonerCare Program Employment, Income\*, and Total Expenditures**  
**by Type of Expenditure**

Expenditure Category	Employment	Income*	Total Expenditures
<b>Administrative Services</b>			
OHCA administrative services	471	\$29,423,120	\$121,357,596
Other state agencies <sup>1</sup> administrative services	<u>482</u>	<u>\$30,110,284</u>	<u>\$124,117,003</u>
<b>Administrative Services' Subtotals</b>	<b><u>953</u></b>	<b><u>\$59,533,404</u></b>	<b><u>\$245,474,599</u></b>
<b>Program Services</b>			
Hospital care	11,434	\$588,645,188	\$1,228,955,826
Physician services	7,545	\$539,882,475	\$912,758,742
Home health care/Personal care services	11,915	\$347,369,910	\$606,535,533
Nursing and residential care facilities	15,026	\$402,621,670	\$576,436,225
Pharmacy/Durable medical equipment	6,832	\$216,799,856	\$466,342,962
Other medical and health services <sup>2</sup>	2,073	\$108,297,666	\$301,336,263
Medical education	1,705	\$43,151,845	\$100,279,873
Other non-personal health services <sup>3</sup>	<u>1,219</u>	<u>\$24,262,283</u>	<u>\$59,779,680</u>
<b>Program Services' Subtotals</b>	<b><u>57,749</u></b>	<b><u>\$2,271,030,893</u></b>	<b><u>\$4,252,425,104</u></b>
<b>SOONERCARE GRAND TOTALS</b>	<b><u>58,702</u></b>	<b><u>\$2,330,564,297</u></b>	<b><u>\$4,497,899,703</u></b>

Source: All expenditures data and OHCA administrative services data received from Oklahoma Health Care Authority, December 2010; all other data estimated based on IMPLAN data or state trend data.

\* Income includes wages, salaries, and benefits, and proprietors' income.

<sup>1</sup> Other state agencies providing administration of SoonerCare include Oklahoma Department of Human Services, Oklahoma Office of Juvenile Affairs, Oklahoma Department of Mental Health and Substance Abuse Services, and Oklahoma State Department of Health.

<sup>2</sup> Other medical and health services include laboratory, radiology, case management, mental health rehabilitation, multi-systemic therapy, etc.

<sup>3</sup> Other services include non-personal health care services such as emergency transportation, accommodations, room and board, Physician Manpower Training Commission, family planning, Logisticare capitated payments, etc.

For instance, OHCA provided total direct expenditures (output) for hospital care of \$1.2 billion. Utilizing the IMPLAN ratios of employment to each million dollars of total expenditures, direct employment was estimated to be 11,434. Based on the average income per employee for hospital care employees from the IMPLAN model, total direct income for hospital care was estimated at \$588.6 million.



The hospitals in Oklahoma employ over 68,000 employees; nursing homes also employ a large number of employees. The direct employment from SoonerCare program of 11,434 for hospitals and 15,026 for nursing and residential care facilities illustrates how extremely important the program is to both hospitals and nursing homes in Oklahoma. SoonerCare covers approximately 64 percent of the births in Oklahoma. SoonerCare funds 69 percent of Oklahoma's total nursing home occupied bed days.

The same methodology that was utilized to determine employment and income for hospital care was applied to each category of program services to derive the employment and income for each category. The total direct impact of program services was 57,749 employees and nearly \$2.3 billion in direct income; all based on total direct program services' expenditures of just under \$4.3 billion. Combining the administrative and program services results in total direct SoonerCare employment of 58,702 and total direct SoonerCare income of \$2.3 billion, based on total direct SoonerCare expenditures of nearly \$4.5 billion.

## Secondary and Total Impacts of SoonerCare, SFY 2010

Secondary and total impacts of SoonerCare for administrative services and program services will be illustrated. Multipliers for employment, income, and output were derived from the IMPLAN model for both administration and program services.

The employment multiplier for the government sector of Oklahoma of 1.70 is utilized to determine the secondary and total impacts of administration (**Table 4**). Applying the employment multiplier of 1.70 to the total direct administrative employment of 953, secondary employment is estimated at 667 employees. Thus, the total of direct and secondary employment created by SoonerCare was 1,620.

The income impact created by SoonerCare administrative services can be estimated in a similar manner. The total combined direct payrolls from OHCA and the other state agencies were estimated to be \$59.5 million. Applying the income multiplier for the government sector of Oklahoma of 1.51 to this payroll generated a secondary impact of almost \$30.4 million and a total income impact of almost \$89.9 million throughout the Oklahoma economy.

OHCA provided SoonerCare expenditures of approximately \$245.5 million for administrative services for the program in SFY 2010. This includes the total direct administration expenditures (payroll plus benefits, building expenses, furniture, utilities, supplies, etc.) both within the OHCA and within the other state agencies. An output multiplier for the government sector is 2.53. Upon applying the output multiplier, secondary expenditures resulting in other businesses throughout the economy total nearly \$375.6 million. The total output impact of SoonerCare is nearly \$621.1 million; this represents total direct expenditures from SoonerCare administrative services and total secondary expenditures in all other sectors in the economy due to total SoonerCare administrative services' expenditures.

**Table 4**  
**Employment, Income<sup>1</sup>, and Output<sup>2</sup> Impact from SoonerCare**  
**Administrative Services on the Economy of the State of Oklahoma, SFY 2010**

Category	Administrative Services Impact	
<b>Employment Impact</b>		
Total Direct Employment	953	
Employment Multiplier		1.70
Secondary Impact		<u>667</u>
Total Employment Impact		<u>1,620</u>
<b>Income<sup>1</sup> Impact</b>		
Total Direct Income	\$59,533,404	
Income Multiplier		1.51
Secondary Impact		<u>\$30,362,036</u>
Total Income Impact		<u>\$89,895,440</u>
<b>Output<sup>2</sup> Impact</b>		
Total Direct Expenditures	\$245,474,599	
Output Multiplier		2.53
Secondary Impact		<u>\$375,576,136</u>
Total Output Impact		<u>\$621,050,735</u>

SOURCE: Employment and income for administration from Oklahoma Health Care Authority; Minnesota IMPLAN Group, Inc., IMPLAN multipliers for government sector for the State of Oklahoma.

<sup>1</sup> Income is the total of all wages, salaries, and benefits, and proprietors' income.

<sup>2</sup> Output is the total of all expenditures.

From SoonerCare program services' total direct expenditures, direct employment and income were estimated in **Table 3**. The secondary and total economic impacts of SoonerCare program services are calculated in **Table 5**. **Even though this report estimates the aggregate impact of SoonerCare on the Oklahoma economy, many other health care (non-SoonerCare) services in rural Oklahoma could not survive without SoonerCare dollars.**

The appropriate IMPLAN multipliers were applied to each category of program services and an aggregate multiplier was calculated. The aggregate state program services' multiplier for employment was 1.96. The total employment impact of SoonerCare was 113,188 jobs, which includes those employees directly employed as a result of SoonerCare program services of

**Table 5**  
**Employment, Income<sup>1</sup>, and Output<sup>2</sup> Impact from SoonerCare Program Services**  
**on the Economy of the State of Oklahoma, SFY 2010**

Category			
<b>Employment Impact</b>			
Total Direct Employment	57,749		
Employment Multiplier		1.96	
Secondary Impact			<u>55,439</u>
Total Employment Impact			<b><u>113,188</u></b>
<b>Income<sup>1</sup> Impact</b>			
Total Direct Income	\$2,271,030,893		
Income Multiplier		1.83	
Secondary Impact			<u>\$1,884,955,641</u>
Total Income Impact			<b><u>\$4,155,986,534</u></b>
<b>Output<sup>2</sup> Impact</b>			
Total Direct Output	\$4,252,425,104		
Output Multiplier		2.48	
Secondary Impact			<u>\$6,293,589,154</u>
Total Output Impact			<b><u>\$10,546,014,258</u></b>

SOURCE: Employment and income for health services from Table 6; Minnesota IMPLAN Group, Inc., IMPLAN multipliers for the State of Oklahoma, 2004 data.

<sup>1</sup> Income is the total of all wages, salaries, and benefits, and proprietors' income.

<sup>2</sup> Output is the total of all expenditures.

57,749 employees and the secondary employment created throughout the other sectors of Oklahoma's economy of 55,439 employees.

The aggregate state program services' multiplier for income was 1.83. The income impact of SoonerCare includes the income directly resulting from SoonerCare of nearly \$2.3 billion and the secondary income created throughout the other sectors of Oklahoma's economy of nearly \$1.9 billion, for the total income impact of almost \$4.2 billion.

The direct impact of SoonerCare program services' expenditures was nearly \$4.3 billion. The aggregate state program services' multiplier was 2.48 and, when applied, resulted in a secondary impact of nearly \$6.3 billion in expenditures in other businesses or sectors as a result of SoonerCare program services' expenditures. The total impact of SoonerCare program

services' expenditures was estimated at \$10.5 billion, representing the total direct expenditures from SoonerCare program services and the total expenditures from all other businesses or sectors as a result of SoonerCare program services' expenditures.

### **Impact of SoonerCare on Oklahoma Taxes, SFY 2010**

The impact SoonerCare has on employment, income, and output from both administrative and program expenditures is tremendous. The income in turn generates state taxes which come back to the State of Oklahoma. State sales taxes, state income taxes, and selected “other” state taxes resulting from SoonerCare expenditures are presented in **Table 6**.

To determine the impact of the state taxes, the direct employment (953) for SoonerCare administrative services and the direct employment (57,749) for SoonerCare program expenditures were combined for a total direct employment of 58,702 (**Table 3**). Also, the secondary employment (667) for administrative services (**Table 4**) and the secondary employment (55,439) for program services (**Table 5**) were combined for a total secondary employment of 56,106.

State taxes were estimated by deriving the amount of Oklahoma sales tax generated per employee from the Oklahoma Office of State Finance, “Oklahoma 2009 Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2009.” The average sales tax per employee of \$1,170 was then multiplied by the number of direct employees of 58,702 and secondary employees of 56,106 to derive the estimates of state sales tax paid by direct employees of \$68.7 million and paid by secondary employees of \$65.6 million. The total sales tax impact was estimated at \$134.3 million (**Table 6**).

State income taxes were estimated from data provided by the OHCA. These were compared to state data from the Oklahoma Office of State Finance, “Oklahoma 2009 Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2009,” for verification and validation. The total amount of state taxes withheld for OHCA employees was obtained. From this total, the amount of state income tax withholding per employee was calculated to be

**Table 6**  
**Impact of Selected Oklahoma Taxes**  
**Generated by SoonerCare of Oklahoma**

Type of Tax	Average Tax/Employee	State Total Tax Amounts	
<b>State Sales Tax</b>			
State sales tax - Direct employees	\$1,1700	\$68,681,340	
State sales tax - Secondary employees	\$1,170	<u>\$65,644,137</u>	
Total Impact - State Sales Taxes			\$134,325,477
<b>State Income Tax</b>			
State income tax - Direct employees	\$1,753	\$102,904,606	
State income tax - Secondary employees	\$1,753	<u>\$98,353,993</u>	
Total Impact - State Income Taxes			\$201,258,599
<b>Selected "Other" State Taxes<sup>1</sup></b>			
Selected "Other" state taxes - Direct employees	\$137	\$8,026,713	
Selected "Other" state taxes - Secondary employees	\$137	<u>\$7,671,759</u>	
Total Impact - Selected "Other" State Taxes			<u>\$15,698,472</u>
Total Impact - State Sales, State Income, & Selected "Other" State Taxes			<b><u>\$351,282,548</u></b>

<sup>1</sup> Selected "other" state taxes include: alcoholic beverage excise taxes, mixed beverage gross receipts taxes, beverage taxes, cigarette taxes, and tobacco products taxes.

\$1,753 and applied to both direct and secondary employment. The total estimated state income taxes resulting from SoonerCare are estimated to be \$201.3 million.

The selected “other” state taxes include alcoholic beverage excise taxes, mixed beverage gross receipts taxes, beverage taxes, cigarette taxes, and tobacco products taxes and data were from the Oklahoma Office of State Finance, “Oklahoma 2009 Comprehensive Annual Financial Report for Fiscal Year Ended June 30, 2009.” The selected “other” state taxes were calculated by deriving the state average of selected “other” taxes per employee of \$137. This procedure produced an estimate of \$15.7 million in selected “other” state taxes. In summary, the state contributed approximately \$785.5 million from Oklahoma state funds. These dollars when matched by the federal dollars and including secondary impacts generated a total of state sales tax, state income tax, and selected “other” state taxes of \$351.3 million.



### **Summary of Impacts of SoonerCare, SFY 2010**

The summary impact table presents the combined impacts of administrative services and program expenditures for SoonerCare and the impacts of the selected state taxes from SoonerCare (**Table 7**). For employment, SoonerCare for SFY 2010 had direct employment impact of 58,702, secondary employment impact of 56,106, and total employment impact of 114,808. For income, SoonerCare for SFY 2010 had direct income impact of \$2.3 billion, secondary income impact of \$1.9 billion, and total income impact of \$4.2 billion. For output, SoonerCare for SFY 2010 had direct output impact of \$4.5 billion, secondary output impact of \$6.7 billion, and total output impact of \$11.2 billion. For state taxes, SoonerCare for SFY 2010 had direct state taxes' impact of \$179.6 million, secondary state taxes' impact of \$171.7 million, and total state taxes' impact of approximately \$351.3 million. State taxes include state sales tax, state income tax, and selected "other" state taxes. Selected "other" state taxes include alcoholic beverage excise taxes, mixed beverage gross receipts taxes, beverage taxes, cigarette taxes, and tobacco products taxes.

The total impact of these state taxes throughout all businesses in Oklahoma was \$351.3 million. From the total state funding of \$785.5 million for SFY 2010 for SoonerCare, a portion of these state funds are recovered through the generation of \$351.3 million in state taxes. These state taxes offset the cost of SoonerCare by approximately 45 percent, as \$1.00 out of every \$2.24 of state funds invested in SoonerCare are recovered through these state tax dollars.

**In summary, Oklahoma's investment of \$785.5 million in SFY 2010 for SoonerCare created 114,808 jobs; generated almost \$4.3 billion of income; resulted in approximately \$351.3 million in state sales, state income, and selected "other" state taxes; and generated total business spending of almost \$11.2 billion throughout the State of Oklahoma.**

**Table 7**  
**Summary of Employment, Income, Output, and Tax Impacts**  
**from SoonerCare of Oklahoma, SFY 2010**

Category of Impact	Direct Impact	Secondary Impact	Total Impact
<b>Employment</b>			
Administrative Services	953	667	1,620
Program Services	<u>57,749</u>	<u>55,439</u>	<u>113,188</u>
Employment Total	<u><b>58,702</b></u>	<u><b>56,106</b></u>	<u><b>114,808</b></u>
<b>Income</b>			
Administrative Services	\$59,533,404	\$30,362,036	\$89,895,440
Program Services	<u>\$2,271,030,893</u>	<u>\$1,884,955,641</u>	<u>\$4,155,986,534</u>
Income Total	<u><b>\$2,330,564,297</b></u>	<u><b>\$1,915,317,677</b></u>	<u><b>\$4,245,881,974</b></u>
<b>Output</b>			
Administrative Services	\$245,474,599	\$375,576,136	\$621,050,735
Program Services	<u>\$4,252,425,104</u>	<u>\$6,293,589,154</u>	<u>\$10,546,014,258</u>
Output Total	<u><b>\$4,497,899,703</b></u>	<u><b>\$6,669,165,290</b></u>	<u><b>\$11,167,064,993</b></u>
<b>State Taxes</b>			
State Sales Tax	\$68,681,340	\$65,644,137	\$134,325,477
State Income Tax	\$102,904,606	\$98,353,993	\$201,258,599
Selected "Other" State Taxes	<u>\$8,026,713</u>	<u>\$7,671,759</u>	<u>\$15,698,472</u>
State Taxes' Total	<u><b>\$179,612,659</b></u>	<u><b>\$171,669,889</b></u>	<u><b>\$351,282,548</b></u>

## Proposed SoonerCare Funding Reductions for SFY 2012

Legislation leaders have requested that the OHCA estimate the impact that three SoonerCare funding reduction scenarios will have on the Oklahoma economy. The state and federal funding estimates were provided by OHCA for SoonerCare for the following three scenarios:

- Five percent reduction
- Seven and one-half percent reduction
- Ten percent reduction

The proposed reductions in SoonerCare funding for SFY 2012 are presented in **Table 8**. OHCA provided state and federal funding estimates; for example, for the five percent reduction scenario, the reduction in state funds is estimated to be almost \$48.2 million and the reduction

**Table 8**  
**Proposed Reductions of State and Federal Funds**  
**for SoonerCare based on Five Percent,**  
**Seven and One-Half Percent, and Ten Percent Reductions, SFY 2012**

<b>Proposed Five Percent Reduction</b>	
Reduction in State Funds	(\$48,150,786)
Reduction in Federal Funds	(\$84,185,373)
Total Reduction of State and Federal Funds	<u>(\$132,336,159)</u>
<b>Proposed Seven and One-Half Percent Reduction</b>	
Reduction in State Funds	(\$72,226,179)
Reduction in Federal Funds	(\$126,278,060)
Total Reduction of State and Federal Funds	<u>(\$198,504,239)</u>
<b>Proposed Ten Percent Reduction</b>	
Reduction in State Funds	(\$96,301,572)
Reduction in Federal Funds	(\$168,370,746)
Total Reduction of State and Federal Funds	<u>(\$264,672,318)</u>

SOURCE: Proposed scenarios and state and federal funding amounts provided by Oklahoma Health Care Authority, December 2010.

in federal funds is estimated to be nearly \$84.2 million, for a total reduction in state and federal funds of an estimated \$132.3 million. The state and federal funding reductions from the seven and one-half percent and the ten percent reduction scenarios are also presented in **Table 8**. The proposed reductions in federal and state funds (output) will result in reduced employment and income. Employment and income were estimated using the IMPLAN model discussed earlier in the study and further illustrated in **Appendix A**.

### Estimated Economic Impacts of Reduction Scenarios

The estimated impacts on employment, income and output from the three funding reduction scenarios are presented in **Table 9**. The input-output model used in the analysis is based on fixed coefficients (fixed production functions). This means that the model uses averages to estimate employment and income losses. The model does not estimate at the margin. Thus, if there are inefficiencies or excess profits in the health delivery system, the projected losses would be slightly less. The authors of this report do not feel like there are inefficiencies or excess profits in the health care delivery system in Oklahoma.

For the five percent proposed reduction in SoonerCare federal and state funding of \$132.3 million (**Table 9**), the funding loss is projected to cause a reduction in direct employment of 1,749 jobs and in direct income of \$69.2 million. The multipliers estimate the impact in other sectors due to direct funding losses in SoonerCare. Jobs lost in other sectors are called secondary jobs and equal 1,679. The total estimated jobs lost in the Oklahoma economy from a five percent reduction in SoonerCare funding is estimated to be 3,428 jobs.

Likewise, the impact on income is projected in **Table 9**. Again, the total estimated direct income impact of a five percent reduction is \$69.2 million. The income multiplier of 1.83 estimates secondary income loss in other businesses and industries of nearly \$57.5 million, for a total loss in income of just under \$126.7 million.

The last section of **Table 9** illustrates the output impact. The total direct expenditures for the five percent reduction scenario were provided by OHCA and total over \$132.3 million. The output multiplier of 2.48 estimates the secondary output loss in other sectors of almost \$195.9 million, for an estimated total loss in output in Oklahoma of nearly \$328.2 million.

**Table 9**  
**Employment, Income, and Output Impact on the State of Oklahoma**  
**from Five Percent, Seven and One-Half Percent,**  
**and Ten Percent Reductions in SoonerCare Funds, SFY 2012**

Category	5.0% Reduction	7.5% Reduction	10.0% Reduction
<b>Employment</b>			
Total Direct Employment	(1,749)	(2,623)	(3,498)
Employment Multiplier	1.96	1.96	1.96
Secondary Employment Impact	(1,679)	(2,518)	(3,358)
Total Employment Impact	(3,428)	(5,141)	(6,856)
<b>Income</b>			
Total Direct Income	(\$69,234,665)	(\$103,851,998)	(\$138,469,331)
Income Multiplier	1.83	1.83	1.83
Secondary Income Impact	(\$57,464,772)	(\$86,197,158)	(\$114,929,545)
Total Income Impact	(\$126,699,437)	(\$190,049,156)	(\$253,398,876)
<b>Output</b>			
Total Direct Output	(\$132,336,159)	(\$198,504,239)	(\$264,672,318)
Output Multiplier	2.48	2.48	2.48
Secondary Output Impact	(\$195,857,515)	(\$293,786,274)	(\$391,715,031)
Total Output Impact	(\$328,193,674)	(\$492,290,513)	(\$656,387,349)

SOURCES: Proposed scenarios and proposed funding reduction amounts provided by Oklahoma Health Care Authority, December 2010; multipliers derived from IMPLAN from Minnesota Implan Group, Inc. (MIG), December 2010.

**Table 9** also illustrates the economic impacts for the other two proposed reduction scenarios with direct, secondary and total impacts of the estimated losses from employment, income, and output in the Oklahoma economy.

## Summary

The objective of this report was 1) to estimate the economic impact of SoonerCare of Oklahoma on the state's economy for SFY 2010 and 2) to illustrate the economic impacts of SoonerCare reductions of five percent, seven and one-half percent, and ten percent for SFY 2012. Although there is a tremendous amount of information about the program services, providers, and recipients, the economic impact is not well known.

Oklahoma invested approximately \$785.5 million in SoonerCare of Oklahoma and received federal matching dollars of \$2.7 billion. Oklahoma also received federal stimulus funds of \$421.1 million; the federal stimulus funds are not guaranteed annually and, therefore, are not included in the formulas presented here. For the state dollars and the federal matching dollars, every state dollar spent, federal matching dollars were \$2.08. Another way to express this is that for every dollar spent on SoonerCare in Oklahoma, 32¢ were state dollars and 68¢ were federal matching dollars.

SoonerCare spent only 5.5 percent of total SoonerCare funds on administration of the program. The remaining 94.5 percent of SoonerCare funds were expended on program services. Total SoonerCare revenues for SFY 2010 were \$4.5 billion from all sources.

For employment, SoonerCare for SFY 2010 had direct employment impact of 58,702, secondary employment impact of 56,106, and total employment impact of 114,808. For income (wages, salaries, and benefits, and proprietors' income), SoonerCare for SFY 2010 had direct income impact of \$2.3 billion, secondary income impact of \$1.9 billion, and total income impact of \$4.2 billion. For output (total expenditures), SoonerCare for SFY 2010 had direct output impact of \$4.5 billion, secondary output impact of \$6.7 billion, and total output impact of \$11.2 billion. For state taxes, SoonerCare for SFY 2010 had direct state taxes' impact of \$179.6

million, secondary state taxes' impact of \$171.7 million, and total state taxes' impact of approximately \$351.3 million. From the total state funding of \$785.5 million for SFY 2010 for SoonerCare, a portion of these state funds are recovered through the generation of these \$351.3 million in state taxes. These state taxes offset the cost of SoonerCare by approximately 45 percent, as \$1.00 out of every \$2.24 of state funds invested in SoonerCare are recovered through these state tax dollars.

In summary, Oklahoma's investment of \$785.5 million in SFY 2010 for SoonerCare created 114,808 jobs, generated almost \$4.3 billion of income, resulted in approximately \$351.3 million in state sales, state income, and selected "other" state taxes, and generated total business spending of almost \$11.2 billion throughout the State of Oklahoma.

The second objective was to illustrate the economic impacts on the State of Oklahoma for SFY 2012 from three SoonerCare funding reduction scenarios: five percent reduction, seven and one-half percent reduction, and ten percent reduction.

If SoonerCare expenditures are reduced by five percent for SFY 2012, state funds will be reduced \$48.2 million and federal funds \$84.2 million, for a total loss of state and federal funds of \$132.3 million. The economic impacts on the State of Oklahoma for SFY 2012 due to a five percent reduction in SoonerCare are estimated to be the loss of 3,428 jobs, the loss of \$126.7 million in income (wages, salaries, and benefits, and proprietors' income), and the loss of \$328.2 million in output (total expenditures) throughout the economy of the State of Oklahoma.

If SoonerCare expenditures are reduced by seven and one-half percent for SFY 2012, state funds will be reduced \$72.2 million and federal funds \$126.3 million, for a total loss of state and federal funds of \$198.5 million. The economic impacts on the State of Oklahoma for SFY 2012 due to a seven and one-half percent reduction in SoonerCare are estimated to be the



loss of 5,141 jobs, the loss of \$190.0 million in income (wages, salaries, and benefits, and proprietors' income), and the loss of \$492.3 million in output (total expenditures) throughout the economy of the State of Oklahoma.

If SoonerCare expenditures are reduced by ten percent for SFY 2012, state funds will be reduced \$96.3 million and federal funds \$168.4 million, for a total loss of state and federal funds of \$264.7 million. The economic impacts on the State of Oklahoma for SFY 2012 due to a ten percent reduction in SoonerCare are estimated to be the loss of 6,856 jobs, the loss of \$253.4 million in income (wages, salaries, and benefits, and proprietors' income), and the loss of \$656.4 million in output (total expenditures) throughout the economy of the State of Oklahoma.

**If SoonerCare funds are reduced, health care will still be provided to former SoonerCare members; the cost of this care will be shifted to those with insurance and those who can pay for their health care; thus, continuing to increase health care costs. A large portion of the needed health services will be provided through hospital emergency rooms, etc. Uncompensated hospital emergency room visits will force shifting of costs to paying health care users, which will, in turn, increase health insurance costs and overall health care costs.**

The loss of SoonerCare funds will result in large losses to the economy of Oklahoma. Not only will the overall economy of Oklahoma suffer from SoonerCare fund reductions, but the residents of Oklahoma that require these program services will seek alternatives to obtaining needed health, medical, and other program services; thus, placing a larger cost burden on hospitals, insurance companies, and paying health care users.

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## **Appendix A**

### **Model and Data Used to Estimate Employment and Income Multipliers**

## **Appendix A**

### **Model and Data Used to Estimate Employment and Income Multipliers**

A computer spreadsheet that uses state IMPLAN multipliers was developed to enable community development specialists to easily measure the secondary benefits of the health sector on a state, regional or county economy. The complete methodology, which includes an aggregate version, a disaggregate version, and a dynamic version, is presented in Measuring the Economic Importance of the Health Sector on a Local Economy: A Brief Literature Review and Procedures to Measure Local Impacts (Doeksen, et al., 1997). A brief review of input-output analysis and IMPLAN are presented here.

#### **A Review of Input-Output Analysis**

Input-output (I/O) (Miernyk, 1965) was designed to analyze the transactions among the industries in an economy. These models are largely based on the work of Wassily Leontief (1936). Detailed I/O analysis captures the indirect and induced interrelated circular behavior of the economy. For example, an increase in the demand for health services requires more equipment, more labor, and more supplies; which, in turn, requires more labor to produce the supplies, etc. By simultaneously accounting for structural interaction between sectors and industries, I/O analysis gives expression to the general economic equilibrium system. The analysis utilizes assumptions based on linear and fixed coefficients and limited substitutions among inputs and outputs. The analysis also assumes that average and marginal I/O coefficients are equal.

Nonetheless, the framework has been widely accepted and used. I/O analysis is useful when carefully executed and interpreted in defining the structure of a region, the interdependencies among industries, and forecasting economic outcomes.

The I/O model coefficients describe the structural interdependence of an economy. From the coefficients, various predictive devices can be computed, which can be useful in analyzing economic changes in a state, a region or a county. Multipliers indicate the relationship between some observed change in the economy and the total change in economic activity created throughout the economy.

### **MicroIMPLAN**

MicroIMPLAN is a computer program developed by the United States Forest Service (Alward, et al., 1989) to construct I/O accounts and models. Typically, the complexity of I/O modeling has hindered practitioners from constructing models specific to a community requesting an analysis. Too often, inappropriate U.S. multipliers have been used to estimate local economic impacts. In contrast, IMPLAN can construct a model for any county, region, state, or zip code area in the United States by using available state, county, and zip code level data. Impact analysis can be performed once a regional I/O model is constructed.

Five different sets of multipliers are estimated by IMPLAN, corresponding to five measures of regional economic activity. These are: total industry output, personal income, total income, value added, and employment. Two types of multipliers are generated. Type I multipliers measure the impact in terms of direct and indirect effects. Direct impacts are the changes in the activities of the focus industry or firm, such as the closing of a hospital. The focus business changes its purchases of inputs as a result of the direct impacts. This produces indirect impacts in other business sectors. However, the total impact of a change in the economy consists of direct, indirect, and induced changes. Both the direct and indirect impacts change the flow of dollars to the state, region, or county's households. Subsequently, the households alter their consumption accordingly. The effect of the changes in household consumption on businesses in a

community is referred to as an induced effect. To measure the total impact, a Type II multiplier is used. The Type II multiplier compares direct, indirect, and induced effects with the direct effects generated by a change in final demand (the sum of direct, indirect, and induced divided by direct).

**Minnesota IMPLAN Group, Inc. (MIG)**

Dr. Wilbur Maki at the University of Minnesota utilized the input/output model and database work from the U. S. Forest Service's Land Management Planning Unit in Fort Collins to further develop the methodology and to expand the data sources. Scott Lindall and Doug Olson joined the University of Minnesota in 1984 and worked with Maki and the model.

As an outgrowth of their work with the University of Minnesota, Lindall and Olson entered into a technology transfer agreement with the University of Minnesota that allowed them to form MIG. At first, MIG focused on database development and provided data that could be used in the Forest Service version of the software. In 1995, MIG took on the task of writing a new version of the IMPLAN software from scratch. This new version extended the previous Forest Service version by creating an entirely new modeling system that included creating Social Accounting Matrices (SAMs) – an extension of input-output accounts, and resulting SAM multipliers. Version 2 of the new IMPLAN software became available in May of 1999. For more information about Minnesota IMPLAN Group, Inc., please contact Scott Lindall or Doug Olson by phone at 651-439-4421 or by email at [info@implan.com](mailto:info@implan.com) or review their website at [www.implan.com](http://www.implan.com).