

The Economic Impact of the West Virginia Free & Charitable Clinics on the State's Economy

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Table of Contents

List of Figures and Tables	iv
Executive Summary	v
1 Introduction	1
2 Methodology	1
3 Impact of Clinic Expenditures.....	3
4 Impact of Clinic Medical Services.....	4
5 Total Economic Impact.....	4
6 Conclusion	6



List of Figures and Tables

Figure 1: Total Impact of the West Virginia Free & Charitable Clinics.....	v
Figure 2: Economic Impact Flow	2
Table 1: Economic Impact of Clinic Spending	3
Table 2: Economic Impact of Clinic Medical Services	4
Table 3: Total Economic Impact.....	5
Figure 3: Total Economic Impact Comparison	5



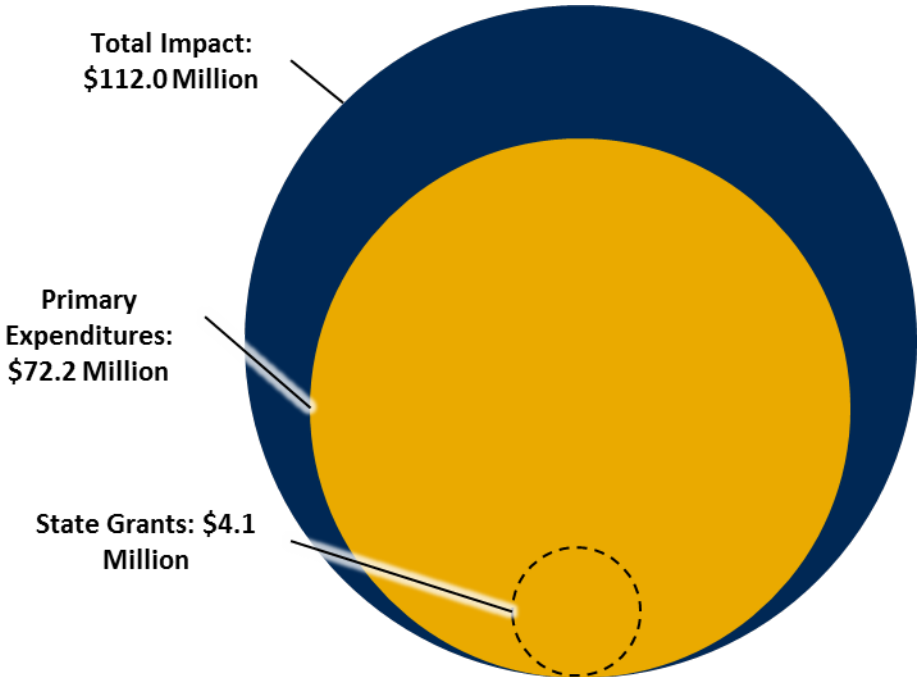
Executive Summary

The West Virginia Association of Free & Charitable Clinics was incorporated in 2001 to advance and promote access to healthcare for uninsured and medically underserved West Virginians. It exists to advocate for West Virginia's eight Free & Charitable Clinics and the patients they serve, to secure funding necessary to treat the patients served by its member clinics' programs, and to assist the clinics with issues that affect all Free & Charitable Clinics in West Virginia.

In this report, we estimate the economic impact of the clinics on the state's economy. We examine the economic impact to the state's overall output, employment, income, and tax revenue. The economic value of the free and charitable clinics encompasses a number of different types of economic impacts. The clinics' operational expenditures are spent in the West Virginia economy generating business activity. In addition, the medical services provided by the clinics provide benefits for local households, and generate economic activity. All of these expenditures constitute the economic benefit to West Virginia of the clinics. Our primary findings are as follows:

- **We estimate the total economic impact of the West Virginia Free & Charitable Clinics to be \$112 million.**
- Expenditures from the clinics are expected to support **employment of 961 workers across West Virginia who will earn total compensation of nearly \$38.7 million.**
- The clinics are expected to return nearly **\$1.3 million in tax revenue to the state.**
- The clinics **generate nearly \$72.1 million in direct economic activity and approximately \$40 million indirectly** compared with about \$4 million in state grant funding (see Figure 1).

Figure 1: Total Impact of the West Virginia Free & Charitable Clinics



1 Introduction

The West Virginia Association of Free & Charitable Clinics (WVAFCC) was incorporated in 2001 to advance and promote access to healthcare for uninsured and medically underserved West Virginians.¹ It exists to advocate for West Virginia's eight Free & Charitable Clinics and the patients they serve, to secure funding necessary to treat the patients served by its member clinics' programs, and to assist the clinics with issues that affect all Free & Charitable Clinics in West Virginia.

In this report, we estimate the economic impact of the Free & Charitable Clinics (hereafter clinics) on the West Virginia economy. We examine the economic impact to the state's overall output, employment, income, and tax revenue. The economic value of the clinics encompasses a number of different types of economic impacts. The clinics' operational expenditures are spent in the West Virginia economy generating business activity. In addition, the medical services provided by the clinics provide benefits for local households and generate secondary economic activity. All of these expenditures constitute the economic benefit to West Virginia of the clinics.

We begin with a discussion of the economic impact methodology, followed by the impact estimates and conclusion.

2 Methodology

To estimate the economic impacts of the West Virginia Free & Charitable Clinics, we use a detailed model of the West Virginia economy.² The expenditures for wages and benefits and other clinic spending are called the direct impact of the clinics. The value of the medical services provided by the clinics will be an indirect impact in this study. However, the total impact is not limited to the direct impact, but also includes the secondary economic impact accrued as those expenditures are re-spent throughout the rest of the economy.

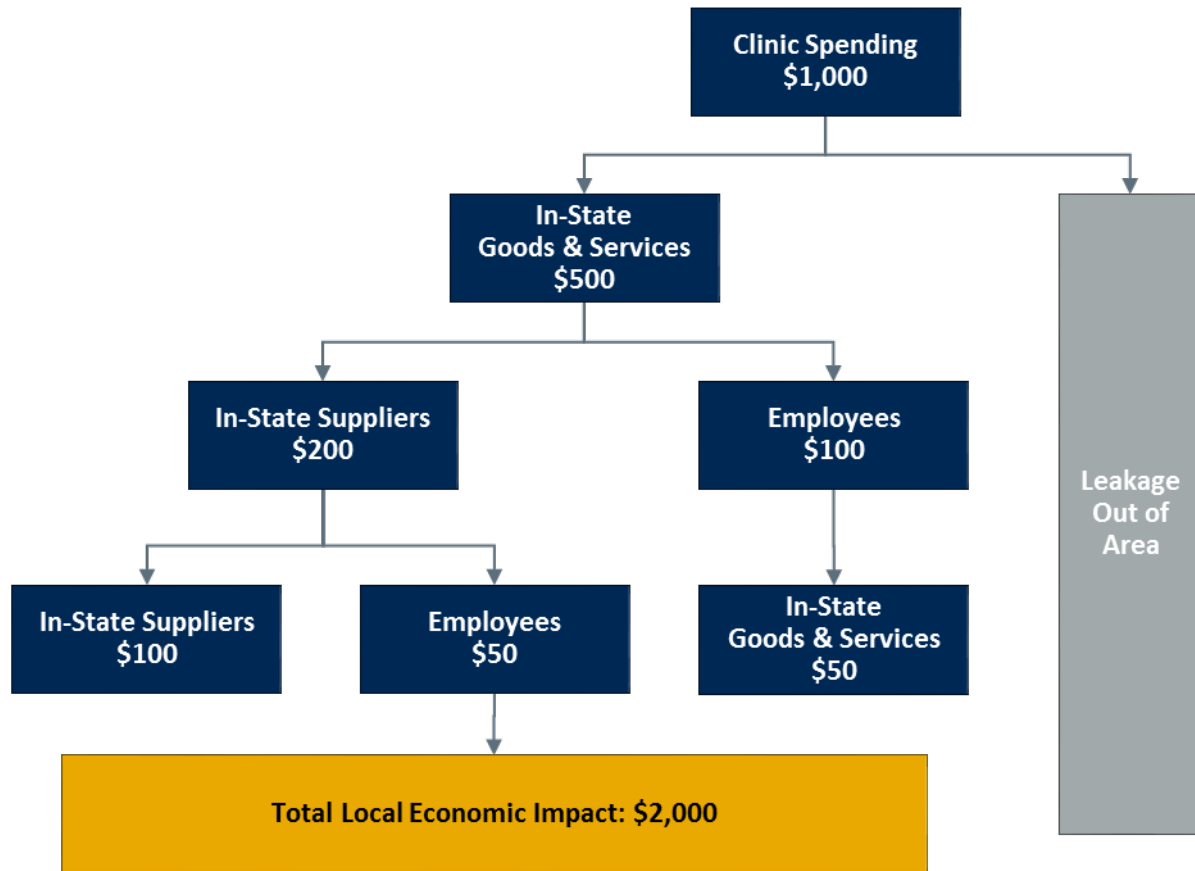
For example, as depicted in Figure 2, each year the clinics purchase a variety of goods and services, such as medical supplies, electricity, insurance, and various other items. As the suppliers of these inputs increase production, their subsequent suppliers will increase production, and so on. In addition, the clinics directly employ a number of workers, part of whose income will be spent in the West Virginia economy, which generates more output, income, and employment. These secondary impacts together form what is known as the "multiplier effect." The original stimulus to the economy from the clinics' expenditures is re-spent multiple times through the rest of the economy. At each stage, some of the expenditures "leak" out of West Virginia as they are spent at companies outside the state. The combined direct impact and secondary impacts together constitute the total economic impact of the clinics' operations.

¹ Please see <http://www.wvafc.org/> for additional information on the WVAFCC.

² This study was conducted using the IMPLAN modeling software, an industry-standard input-output model of the economy. More information about IMPLAN can be found at <http://www.implan.com>.



Figure 2: Economic Impact Flow



Data for this study was collected through a survey administered by the BBER with the assistance of the WVAFCC. The surveys asked for the number of employees at the various clinics, wages and benefits, other spending by the clinics, and an estimate of the cost of the medical services provided.³

To proceed with the analysis, we had to make several assumptions. First, in order to estimate the economic impact of the clinics, we assume a counterfactual scenario where the clinics are eliminated from the local economy. This type of analysis is called an economic contribution analysis, and assumes the rest of the economy is unchanged by the elimination of the clinics.

Second, we assume that the amount of medical services provided by the clinics is equivalent to the amount of income saved by the households using the clinics, and that this savings is spent in the local economy on non-medical expenditures. However, the actual increase in household non-medical expenditures is likely to be considerably lower than the value of medical services the households receive from the clinics. If the clinics did not exist, the low-income patients served by the clinics would most likely forego the majority of treatment they receive, and thus would not spend that money on health care services in the economy. Foregoing treatment would have other costs for the patients and the

³ The BBER did not audit the numbers provided by the clinic administrators.

overall health of the West Virginia economy.⁴ For this reason, we assume that the medical services provided by the clinics have an economic value in the local economy equivalent to household income.

Lastly, we have concentrated our analysis on the positive benefits of the clinics’ spending, rather than the opportunity costs associated with the clinics’ spending. Governments have many priorities, and the dollars going to the clinics may have been spent differently in the state economy. Also, the funding going to the clinics could have been invested in other entities in the state that may have had similar effects.

3 Impact of Clinic Expenditures

Using the results from our surveys conducted with the help of the WVAFCC, we have estimated the direct impacts of the clinics. The clinics together employ 116 people with wages and benefits totaling approximately \$4.1 million. Additionally, the clinics spend roughly \$2.3 million on non-wage items, which contribute to local business income. This generates roughly \$6.4 million in direct spending.

With these expenditures as our starting point, we estimate that the clinics’ spending generates an additional \$4.4 million of secondary economic activity as these monies are re-spent in the rest of the West Virginia economy (see Table 1). Including the initial direct expenditures, the clinics generate \$10.8 million in total economic activity.

Table 1: Economic Impact of Clinic Spending

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Business Volume (\$, millions)	6.4	4.4	10.8
Employment (jobs)	116	35	151
Employee Compensation (\$, millions)	4.1	1.5	5.6
Total Taxes (\$, thousands)	220.7	88.0	308.7

The clinic expenditures support 116 jobs directly, and an additional 35 jobs in the secondary economy. These workers earn \$5.6 million in total compensation. Furthermore, the overall economic activity associated with the clinics is expected to generate nearly \$309 thousand in selected state tax revenue.⁵

⁴ The OECD

(http://oecdobserver.org/news/archivestory.php/aid/1241/Health_and_the_economy:_A_vital_relationship_.html) and Sala-I-Martin (2002) (<http://www.columbia.edu/~xs23/papers/parisconference.pdf>) document the economic effects of poor health for interested readers.

⁵ State tax revenue calculations include personal incomes taxes, sales taxes, and corporation net income taxes.



4 Impact of Clinic Medical Services

In addition to the direct spending by the clinics, the use of the clinics' medical services by households generates additional economic activity in West Virginia. The value of clinic services provided to households was roughly \$108 million, excluding reimbursements from Medicaid and the direct spending by the clinics.⁶ As mentioned in Section 2, the medical services provided do not correspond directly to increased household income, but we are treating these as equivalent measures in this study.

In Table 2 we detail the economic impact of the clinics' medical services. We estimate that households' use of clinic services will generate about \$65.8 million in direct household expenditures in the local economy. This figure is less than the \$108 million in medical services because a substantial portion of household income is spent outside the state. Secondary impacts add another \$35.4 million to the economy for a total annual impact of \$101.2 million for the state of West Virginia.

In addition, the medical services spending is expected to create 810 jobs in the West Virginia economy. Employees are estimated to earn roughly \$33.1 million in compensation from the effects of the medical clinics' spending. Lastly, the medical services spending generates roughly \$952 thousand in state tax revenue.

Table 2: Economic Impact of Clinic Medical Services

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Business Volume (\$, millions)	65.8	35.4	101.2
Employment (jobs)	544	266	810
Employee Compensation (\$, millions)	21.8	11.3	33.1
Total Taxes (\$, thousands)	542.8	409.4	952.2

5 Total Economic Impact

Table 3 shows the total economic impact of the West Virginia Free & Charitable Clinics. The total business volume generated is \$112 million. The clinics' direct spending and provision of medical services is expected to generate 961 jobs in the West Virginia economy with employees supported by the direct and indirect effects earning \$38.7 million. The clinics' impact generates nearly \$1.3 million in state tax revenues.

⁶ Ebenezer Medical Outreach Clinic was not included in medical services spending due to data limitations.

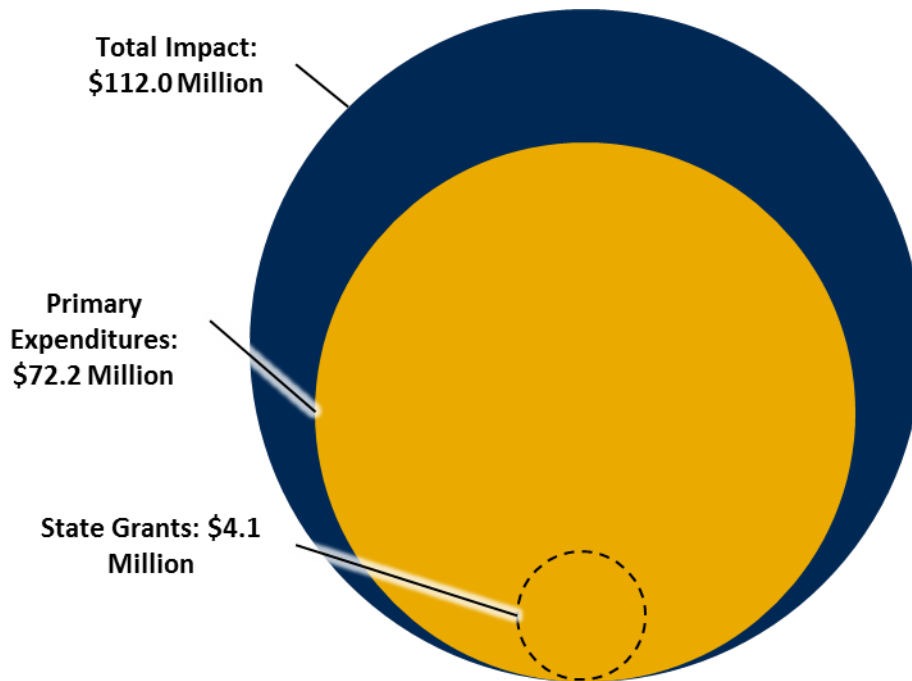


Table 3: Total Economic Impact

	Direct Impact	Indirect & Induced Impact	Total Economic Impact
Business Volume (\$, millions)	72.2	39.8	112.0
Employment (job-years)	660	301	961
Employee Compensation (\$, millions)	25.9	12.8	38.7
Total Taxes (\$, millions)	0.8	0.5	1.3

In Figure 3 we compare the total direct expenditures on the clinics with the total economic impact generated by the clinics in the state of West Virginia. The direct spending by the clinics generates more than \$72 million in direct economic activity. Secondary impacts from the medical services provided generate nearly \$40 million in secondary economic activity. These impacts are net economic gains in West Virginia resulting from the clinics' operation and the medical services provided. According to the WVAFCC, the clinics received nearly \$4.1 million in Uncompensated Care grants from the West Virginia government. Thus the total economic impact of West Virginia's clinics is more than 27 times that of the grants allocated to the clinic by the state government.

Figure 3: Total Economic Impact Comparison



6 Conclusion

The West Virginia Free & Charitable Clinics provide a significant economic boost to West Virginia. In this report, we have estimated the economic impact in terms of the dollar value of clinic expenditures and services provided in the state economy. While we caution that the medical services provided by the clinics are not directly equivalent to household spending, the value of those services does provide significant economic benefit to the local economy.

Aside from the impacts on business activity, the operation of the clinics is likely to benefit the state of West Virginia in less obvious ways. Economists call benefits that are difficult to measure with a dollar figure externalities. The clinics may provide a number of positive externalities. One primary positive effect of the clinics is likely to be a healthier local workforce. As mentioned earlier in a footnote, the Organization for Economic Co-operation and Development and Sala-i-Martin (2002) note that healthier workers are more productive and boost economic activity within regions. If West Virginia's workers are healthier as a result of the clinics, this could provide additional productivity boosts not captured in this report.



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