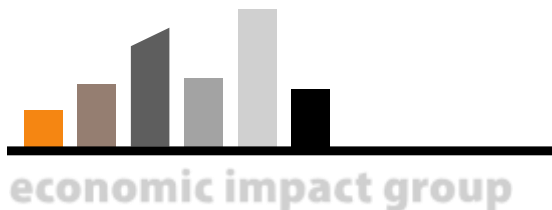


THE PROJECTED ECONOMIC AND FISCAL IMPACTS OF A TENNESSEE HISTORIC REHABILITATION INVESTMENT INCENTIVE

February 2014

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EXECUTIVE SUMMARY

- Thirty-five states, including all of the states contiguous to Tennessee, have enacted historic rehabilitation investment incentives to bring buildings back into active commerce, drive economic development, and create jobs. Historic rehabilitation tax credits incentivize private capital investment that generates a number of beneficial outcomes for communities of all sizes, from small town main streets to city centers.
- Tennessee is one the 15 states that has not yet enacted a state historic rehabilitation tax credit.
- Legislation (H.B. 1474 and S.B. 1723) has been introduced to make Tennessee the 36th state to enact a historic rehabilitation investment incentive. The legislation would create a tax credit of 25 percent of the amount of a certified building's qualified rehabilitation expenditures. The credit would be earned only after all rehabilitation expenditures have been made, and utilization of the credit would be spread in equal installments over three years. Like the federal historic rehabilitation tax credit, the credit would be earned by the building owner and utilized by an investor, in this case insurance companies subject to the Tennessee insurance premium tax.
- The purpose of this report is to estimate the economic and fiscal impact of a Tennessee historic rehabilitation investment incentive. The approach in this report looks at the benefits of the program in terms of spending (construction and operations), tax revenue created, as well as the costs of the program in tax revenues foregone from use of the credit.
- Inputs from a study of the economic and fiscal impacts of Louisiana's incentive were used to quantify the impact of the proposed Tennessee incentive. The Louisiana study measured the economic impact of projects that stimulated new investment in the rehabilitation of historic properties, most of which would have continued to deteriorate and drag down values of surrounding properties without the incentive. For this analysis, it was assumed 1) that \$50 million in new investment would occur in Tennessee; 2) that the mix of those projects would mirror that of Louisiana; 3) that all of this investment was qualified spending under the program; 4) that the projects were constructed equally over the first three years of the program; and 5) that the economic activity that occurs within the rehabilitated historic property represents new economic activity to Tennessee. The key findings below rely on these assumptions. Under these assumptions, the cost to the state for this investment would be \$12.5 million in tax credits.

KEY FINDINGS:

- ✓ In total over the next 20 years, based on \$50 million of historic rehabilitation work over three years incentivized by \$12.5 million in tax credits, the construction and operations of the projects supported by the Tennessee Historic Rehabilitation Tax Credit would create nearly \$28 million in new tax revenue for the State of Tennessee. Importantly, projects supported by the Tennessee

Historic Rehabilitation Tax Credit would generate additional substantial local tax revenue of \$1 million annually through property taxes, retail and hotel operations.

- ✓ Over 20 years, for every dollar that the state will invest in the Tennessee Historic Rehabilitation Tax Credit, it will collect \$2.24 in new tax collections, measured in 2014 dollars. If the state and local revenues are included, the total rises to \$3.86.

CONSTRUCTION PHASE:

- ✓ The projects supported by the Tennessee Historic Rehabilitation Tax Credit would generate an additional \$40.1 million in secondary spending, for a total impact on the Tennessee economy of \$90.1 million.
- ✓ The spending associated with the construction phase of these projects will support \$31.5 million in income for the residents of Tennessee.
- ✓ The construction projects made possible by the Tennessee Historic Rehabilitation Tax Credit would create a total of \$1.5 million in tax revenue for the state of Tennessee and an additional \$1.1 million of local tax revenue.

OPERATIONS PHASE:

- ✓ The projects undertaken with the help of the historic rehabilitation investment incentive will support a total of \$22.3 million in direct spending annually in the state's economy. The direct spending will create an additional \$15.5 million in secondary spending for a total spending increase in the economy of \$37.8 million.
- ✓ On an annual basis, the projects will support \$11.6 million in income for the state's residents.

NET PRESENT VALUE:

Under the assumptions outlined above, the net present value over 20 years of the stream of additional tax revenue less the stream of allowed tax credits is \$6.3 million. This analysis was done using a 5 percent discount rate, which is well above expected inflation and represents a higher risk-free return rate than would be available to the State of Tennessee in the marketplace.

INTRODUCTION

In 1981, during President Reagan's administration, as part of the Kemp-Roth Economic Recovery Tax Act (ERTA), the federal government passed an incentive that provided a tax credit for the rehabilitation of historic commercial properties that is now 20%. This federal incentive has encouraged a great deal of investment and activity in the area of historic preservation and economic development.

The federal legislation has prompted 35 states, including all of the states contiguous to Tennessee, to create their own historic rehabilitation investment incentives. The purpose of these tax incentives is to bring buildings back into active commerce, drive economic development, and create jobs. Historic rehabilitation tax credits incentivize private capital investment that generates a number of beneficial outcomes for communities of all sizes, from small town main streets to city centers.

This study is based on data used in the study of the Louisiana's historic rehabilitation investment incentive that quantified the economic and fiscal impact of historic rehabilitations. For this analysis, it was assumed 1) that \$50 million in new investment would occur in Tennessee; 2) that the mix of those projects would mirror that of Louisiana; 3) that all of this investment was qualified spending under the program; 4) that the projects were constructed equally over the first three years of the program; and 5) that the economic activity that occurs within the rehabilitated historic property represents new economic activity to Tennessee.

Under these assumptions, this study provides a model estimate of both the economic and fiscal impacts that would result from the construction spending, as well as the operations of the new economic activity that locates within these rehabilitated historic properties.

CONSTRUCTION PHASE

There are two distinct phases to the economic activity generated as a result of this tax incentive – construction and on-going operations. Because the construction phase is limited in duration while the operational phase can continue in perpetuity, these two must be analyzed separately. Here we will provide an economic and fiscal impact analysis of the construction phase, and in a subsequent section, we will provide the same for the on-going operations. Summary tables at the end of this report will combine the two fiscal analyses for purposes of calculating a net tax benefit to the State of Tennessee.

Economic Impact

The “economic impact” of any activity is primarily measured by the number of new jobs, amount of new income, and level of new economic output associated with that activity. The foundation of this type of analysis is economic base theory. Simply put, economic base theory states that economic growth occurs when there is an increase in the flow of money into an area through the export of goods and/or services. The “direct” impact of that economic activity includes the number of jobs directly related to that activity and the wages those jobs are paid. It also includes total output and value added (i.e., contribution to GDP) that is directly related to the activity. (See the definitions in Appendix A.)

However, the “direct” activity is just the beginning of the total economic impact. The money that flows into the region is used by companies to purchase goods and services. Some of these are purchased locally, while others are purchased outside the region. To the extent that goods and services are purchased locally, they represent an increase in local employment and income, and therefore, have additional economic impact beyond the “direct” impacts. To the extent that goods and services are purchased outside the region, they are said to have “leaked” out of the local economy and have no more local economic impact. The impacts that arise from the purchases of local businesses represent the “indirect” impact of the initial economic activity.

The third and final component of the economic impact is a result of the spending decisions of employees. Local employees spend some of their income within the region, and as mentioned before, some leaks out. Again, to the extent that their income is spent locally, it also generates an additional increase in local employment and income. These impacts represent the “induced” impact of the initial economic activity.

Therefore, the total economic impact of any economic activity is the sum of the direct, indirect, and induced economic impacts. Obviously, an important aspect of economic impact analysis is the size of the regional economy under review. In a large region (e.g., a state) there would be more opportunity to make local purchases, which means that the new money has more opportunity to be spent locally. Conversely, a small region (e.g., a single county or a group of counties) would experience faster leakage, and consequently, a smaller economic impact.

The process described above is simulated using an input-output model of the economy under consideration, which in this case is the State of Tennessee. Specifically, the economic impact analysis was conducted using the nationally recognized model, IMPLAN, developed by the Minnesota IMPLAN Group.¹ IMPLAN is an input-output model (I-O model) configurable for any multi-county region, state, or even a single county. An I-O model simulates the interconnectedness of industries, government and households in an economy, and tracks the flow of money from one entity to another. It also simulates transactions between the regional economy and the rest of the world. Through looking at these interactions between sectors in an economy, the model can predict what the overall impact would be from new economic activity in a particular sector in a specific economy. For this analysis an IMPLAN model was built and customized for the State of Tennessee using the most recent data on industry interactions within the state, as well as commuting patterns and other demographic information.

Construction spending on the rehabilitation of historic property will obviously generate economic benefits in the area where the project is located as well as the neighboring communities. Workers are employed, materials are purchased, and the wages that are generated are used to buy other goods and services. The Louisiana study referenced in the Introduction to this report measured the impact of new investment in the rehabilitation of historic properties that was due to the state’s historic tax credit program. As previously mentioned, this analysis studied \$50 million in new rehabilitation investment as if it instead occurred in Tennessee and with the same mix of projects experienced in Louisiana. That level of construction spending in Tennessee would generate another \$40.1 million in indirect and induced spending for a total impact on the Tennessee economy of \$90.1 million (Table 1).

Table 1
Economic Impact of the Construction Activity Related to Historic Rehabilitation Investment

	Income*	Value Added*	Output*
Direct	\$16.7	\$19.8	\$50.0
Indirect & Induced	\$14.8	\$24.1	\$40.1
Total Impact	\$31.5	\$43.9	\$90.1

* Income, Value Added, and Output are in millions.
Source: Economic Impact Group, LLC using an IMPLAN model for the State of Tennessee.

That \$90 million of spending obviously creates jobs and income across the state. As can be seen in Table 1, through indirect and induced impacts, that \$50 million of initial construction spending would generate more than \$31 million in total personal income.²

Fiscal Impact

In addition to the economic impact of this construction activity - e.g., income, value added, and output - there are fiscal impacts in the form of new revenues that will accrue to the state and local governments in Tennessee. In the IMPLAN model, the tax impacts represent the historical distribution of collected indirect business taxes (IBT) for Tennessee based on data from the *Annual Census of Government Finance*. The amount of IBT paid is state-specific and industry-specific; however, the distribution of IBT across the various types of tax (property, sales, severance, etc.) is not industry-

¹ Minnesota IMPLAN Group can be accessed at the following URL: www.implan.com
² Total income includes wage and salary income, as well as total benefits.

specific. It is based on the state's distributions as defined by the *Annual Census of Government Finances*.

Unfortunately, the IMPLAN model does not separate state and local government tax revenues when reporting fiscal impact. However, using data from the *Annual Survey of State and Local Government Finances* (SLGF) published by the U.S. Bureau of the Census, the share of the modeled tax revenue impact that will accrue to the state versus local governments can be estimated.

Combined, the model estimates that tax revenues that would accrue to the state and local governments as a result of this construction activity would be \$2.6 million. After using data from the Census Bureau, it is estimated that for Tennessee, 58.2 percent, or \$1.5 million of that would go to the state government (Table 2). The remaining \$1.1 million in taxes would accrue to local governments in Tennessee.

Table 2
Fiscal Impact of the Construction Activity Related to Historic Rehabilitation Investment

	State	Local	Total
Sales Taxes	\$ 1,123,834	\$ 326,274	\$ 1,450,108
Property Taxes	\$ -	\$ 640,446	\$ 640,446
Employee Compensation	\$ 58,528	\$ -	\$ 58,528
Corporations	\$ 127,242	\$ -	\$ 127,242
Other Taxes & Revenues	\$ 227,847	\$ 139,239	\$ 367,083
Total Impact	\$ 1,537,450	\$ 1,105,960	\$ 2,643,410

Source: Economic Impact Group, LLC using an IMPLAN model for the State of Tennessee; *Annual Survey of State and Local Government Finances*, U.S. Census Bureau.

As mentioned above, the construction phase is limited in its duration. As such, it is important to note, that both the economic and fiscal impacts of the construction activity are one-time impacts and last only through the construction phase.

OPERATIONAL PHASE

After the construction phase, the on-going operations of the business activity made possible by the rehabilitation will have significant economic and fiscal impacts to the State of Tennessee. Of course, the types of businesses which operate in these facilities will have a significant impact on the size and scope of those impacts. For example, a retail establishment has a very different economic and fiscal impact than hotel or commercial office. In the Louisiana study, the largest single use of rehabilitated historic buildings was for residential rental property, followed by residential rental mixed-use and then commercial office space. In terms of the dollar volume, the largest use was for hotels, followed by residential rental, and then residential rental mixed use.

Without knowing exactly what businesses are going to operate within these buildings, and the operating budgets of those firms, an estimate of average annual operation expenditures had to be made. That estimate is based on the size of the finished renovation project based on national norms for per square foot construction costs for various uses, i.e., hotel, retail, restaurants, residential rental, etc. For purposes of this analysis, it is assumed that the same operating budget estimates would apply to similar projects in Tennessee.

Economic Impact

Using these operational estimates and construction investment of \$50 million, if the same mix of economic activity that was generated by the Louisiana historic rehabilitation investment incentive occurred in Tennessee, it would inject a total of \$22.3 million in direct spending annually into the Tennessee economy. An important aspect of economic impact is that the activity under review must be *new* to the economy. For example, if an existing restaurant moves from one existing location into a renovated historic space, then the economic activity is not “new” and cannot be included in the economic impact calculations. Since construction activity is by definition new, this distinction is usually not an issue when evaluating construction activity. However, it is important that this distinction be made when analyzing the operations of firms locating in renovated historic spaces.

The author of the Louisiana study justifies the classification of the operational impact as “new” with respect to the hotel-use of the historic renovations. However, no such justification is made with respect to all the other uses examined in the study. So, for purposes of this report, we will assume that the operational activity of all the firms represents new economic activity that would not have occurred at all without the historic rehabilitation incentive. Under this assumption, that level of spending in Tennessee would generate another \$15.5 million in indirect and induced spending for a total impact on the Tennessee economy of \$37.8 million (Table 3).

As with the construction activity, that spending creates jobs and income across the state. As can be seen in Table 3, through indirect and induced impacts, that \$22.3 million of initial spending in these firms would generate more than \$11 million in total personal income.³ However, unlike the

³ Total income includes wage and salary income, as well as total benefits.

construction impacts which are one-time impacts and last only through the construction phase, these impacts will continue as long as the businesses operate.

Table 3
Economic Impact of the Operational Activity Related to Historic Rehabilitation Investment

	Income*	Value Added*	Output*
Direct	\$6.0	\$12.6	\$22.3
Indirect & Induced	\$5.6	\$9.5	\$15.5
Total Impact	\$11.6	\$22.1	\$37.8

* Income, Value Added, and Output are in millions.
Source: Economic Impact Group, LLC using an IMPLAN model for the State of Tennessee.

Fiscal Impact

As was the case with the construction phase, there are fiscal impacts in the form of new revenues that will accrue to the state and local governments in Tennessee as a result of the on-going operation of these businesses. Combined, the model estimates that tax revenues that would accrue to the state and local governments as a result of this activity would be \$2.4 million. After using data from the Census Bureau, it is estimated that for Tennessee, 58 percent, or \$1.4 million of that would go to the state government (Table 4). The remaining \$1.0 million in taxes would accrue to local governments in Tennessee. Again, unlike the construction impacts which are one-time impacts and last only through the construction phase, these impacts continue as long as the businesses continue to operate. As such, the state can expect these revenues to continue in perpetuity.

Table 4
Fiscal Impact of the Operational Activity Related to Historic Rehabilitation Investment

	State	Local	Total
Sales Taxes	\$ 1,088,909	\$ 316,135	\$ 1,405,044
Property Taxes	\$ -	\$ 615,269	\$ 615,269
Employee Compensation	\$ 24,523	\$ -	\$ 24,523
Corporations	\$ 102,949	\$ -	\$ 102,949
Other Taxes & Revenues	\$ 173,365	\$ 76,258	\$ 249,623
Total Impact	\$ 1,389,746	\$ 1,007,662	\$ 2,397,408

Source: Economic Impact Group, LLC using an IMPLAN model for the State of Tennessee; *Annual Survey of State and Local Government Finances*, U.S. Census Bureau.

TAX CREDIT RETURN RATIO

Under the assumptions presented earlier in this report, the total utilization of tax credits of \$12.5 million would be spread out over the first six years of the program. Assuming no more than a 1-year construction period for each project, the new state revenues associated with the construction and operation of these projects are represented in Table 5 for the first 20 years of operation under the program. Under this scenario, the program has a positive return by year 10, and by year 20, the return ratio is 2.24. Using a discount rate of 5 percent, the net present value (NPV) of the tax credit is \$10.3 million while the NPV of the new state revenues is \$16.6 million giving the program analyzed here an overall NPV of \$6.3 million.

Table 5
Tennessee Historic Tax Credit Return Ratio and Net Present Value

	Tax Credit	New State Revenue	Cumulative Return Ratio
2014	\$ 0	\$ 512,483	~
2015	\$ 1,388,889	\$ 975,732	1.07
2016	\$ 2,777,778	\$ 1,438,981	0.70
2017	\$ 4,166,667	\$ 1,389,746	0.52
2018	\$ 2,777,778	\$ 1,389,746	0.51
2019	\$ 1,388,889	\$ 1,389,746	0.57
2020	\$ 0	\$ 1,389,746	0.68
2021	\$ 0	\$ 1,389,746	0.79
2022	\$ 0	\$ 1,389,746	0.90
2023	\$ 0	\$ 1,389,746	1.01
2024	\$ 0	\$ 1,389,746	1.12
2025	\$ 0	\$ 1,389,746	1.23
2026	\$ 0	\$ 1,389,746	1.35
2027	\$ 0	\$ 1,389,746	1.46
2028	\$ 0	\$ 1,389,746	1.57
2029	\$ 0	\$ 1,389,746	1.68
2030	\$ 0	\$ 1,389,746	1.79
2031	\$ 0	\$ 1,389,746	1.90
2032	\$ 0	\$ 1,389,746	2.01
2033	\$ 0	\$ 1,389,746	2.12
2034	\$ 0	\$ 1,389,746	2.24
Total:	\$ 12,500,000	\$ 27,942,624	2.24
PV @ 5%:	\$10,330,111	\$ 16,649,665	1.62
NPV:	\$6,349,554		

Source: Economic Impact Group, LLC using an IMPLAN model for the State of Tennessee; *Annual Survey of State and Local Government Finances*, U.S. Census Bureau.

Definitions

Direct Impacts

The initial economic activity that results from changes in production or expenditures by producers and/or consumers.

Indirect Impacts

The economic activity that results from local industries buying goods and services from other local industries. This cycle of spending continues until all the money leaks out from the regional economy.

Induced Impacts

The economic activity that results from the spending of employees' labor income. This cycle of household spending continues until all the money leaks out from the regional economy.

Wages/Income

All forms of employment income, including employee compensation and proprietor income.

Value Added

The difference between an industry's output and the cost of its intermediate inputs. This includes employee compensation, taxes on production, and gross operating surplus. This is the measure of the contribution to GDP made by the industry.

Output

Final value of industry production. For manufacturing companies, output is sales plus/minus changes in inventory. For service sectors, output is equal to sales. For retail and wholesale trade companies, output equals gross margin, NOT gross sales.

RESEARCHER BIOGRAPHICAL INFORMATION

Dr. Alfred B. Meek

Dr. Meek has more than 20 years of experience in economic/fiscal analysis and research. He is currently the Director of Community Innovation Services at the Georgia Institute of Technology's Enterprise Innovation Institute. Prior to his current time at Georgia Tech, he served for nine years as the Chief Economist and Director of Economic Analysis for a local government in Georgia. Prior to his time in local government, he spent three years as the Director of Applied Research at The University of Georgia's Business Outreach Services and Small Business Development Center. Preceding his work for both Georgia Tech and The University of Georgia, Dr. Meek was the Research Economist for SunTrust Banks, Inc.

Current areas of special focus include economic/fiscal impact analysis, forecasting and modeling, work-force issues, tax policy analysis, and target industry analysis. In addition to his research, Dr. Meek speaks widely on topics relating to economic impact and economic development. He has also written for economic development-related publications, as well as other periodicals. His research on the size and economic impact of the sports industry in the United States was published in *Sport Marketing Quarterly*. This research has been written about and cited in numerous publications - *USA Today*, *Georgia Trend*, *Financial Times London*, *Fortune Magazine*, and *Investors Business Daily* among others.

Dr. Meek is a member of the National Association for Business Economics, and is a past president of the Atlanta Economics Club. He holds a PhD. in Agricultural Economics from The University of Georgia; a Master of Science in Business Economics from Georgia State University; and a Bachelor of Science in Economics from the Georgia Institute of Technology.