



# **Turtle Mountain Casino Resort Economic Impact Analysis**

Grand Forks, North Dakota

Prepared for:

PRAXIS STRATEGY GROUP

**June 2022**

Prepared by:

The Innovation Group  
7852 South Elati Street  
Suite 103  
Littleton, CO 80120  
303.798.7711  
[www.theinnovationgroup.com](http://www.theinnovationgroup.com)

*Draft*

# Turtle Mountain Casino Resort Economic Impacts

## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
ONGOING ANNUAL IMPACTS.....	1
CONSTRUCTION IMPACTS.....	2
<b>INTRODUCTION.....</b>	<b>4</b>
<b>ECONOMIC IMPACT ANALYSIS .....</b>	<b>5</b>
METHODOLOGY .....	5
ECONOMIC IMPACT MODELING OPTIONS .....	9
<i>Analysis-by-Parts for Gaming-Related Operating Impacts</i> .....	9
ONGOING OPERATIONS .....	10
<i>Operating Inputs</i> .....	10
<i>Annual Economic Impacts from Operations</i> .....	11
<i>Fiscal Impacts</i> .....	12
CONSTRUCTION.....	16
<i>Construction Inputs</i> .....	16
<i>Economic Impacts from Construction</i> .....	17
<i>Fiscal Impacts</i> .....	17
<b>APPENDIX: LOCAL BUSINESS BENEFITS .....</b>	<b>21</b>
PRIMARY RESEARCH.....	21
SECONDARY RESEARCH.....	24
<b>DISCLAIMER.....</b>	<b>27</b>

*Draft*

**List of Tables**

Table 1: Turtle Mountain Casino Resort Local Ongoing Impacts..... 1  
Table 2: The Giant Local Ongoing Impacts ..... 2  
Table 3: Tax Impact: Turtle Mountain Casino Resort Ongoing Operations ..... 2  
Table 4: Tax Impact: The Giant Ongoing Operations ..... 2  
Table 5: Turtle Mountain Casino Resort Local Construction Impacts ..... 3  
Table 6: The Giant Local Construction Impacts..... 3  
Table 7: Tax Impact: Turtle Mountain Casino Resort Construction ..... 3  
Table 8: Tax Impact: The Giant Construction ..... 3  
Table 9: Turtle Mountain Casino Resort Direct Effect Inputs – Ongoing Operations (\$000s).... 11  
Table 10: The Giant Direct Effect Inputs – Ongoing Operations (\$000s)..... 11  
Table 11: Turtle Mountain Casino Resort Local Ongoing Impacts..... 12  
Table 12: The Giant Local Ongoing Impacts ..... 12  
Table 13: Local Tax Impact: Turtle Mountain Casino Resort Ongoing Operations (\$000)..... 13  
Table 14: State Tax Impact: Turtle Mountain Casino Resort Ongoing Operations (\$000)..... 13  
Table 15: Federal Tax Impact: Turtle Mountain Casino Resort Ongoing Operations (\$000)..... 14  
Table 16: Local Tax Impact: The Giant Ongoing Operations (\$000) ..... 14  
Table 17: State Tax Impact: The Giant Ongoing Operations (\$000)..... 15  
Table 18: Federal Tax Impact: The Giant Ongoing Operations (\$000)..... 15  
Table 19: Turtle Mountain Casino Resort Estimated Construction Cost Inputs (\$MM)..... 16  
Table 20: The Giant Estimated Construction Cost Inputs (\$MM) ..... 16  
Table 21: Turtle Mountain Casino Resort Local Construction Impacts ..... 17  
Table 22: The Giant Local Construction Impacts..... 17  
Table 23: Local Tax Impact from Construction: Turtle Mountain Casino Resort (\$000)..... 18  
Table 24: State Tax Impact from Construction: Turtle Mountain Casino Resort (\$000)..... 18  
Table 25: Federal Tax Impact from Construction: Turtle Mountain Casino Resort (\$000)..... 19  
Table 26: Local Tax Impact from Construction: The Giant (\$000)..... 19  
Table 27: State Tax Impact from Construction: The Giant (\$000)..... 20  
Table 28: Federal Tax Impact from Construction: The Giant (\$000)..... 20  
Table 29: Change in Retail and Eating and Drinking Establishments 1991-1997 ..... 23  
Table 30: City of San Diego, CA Transient Occupancy Tax Collections (MMs)..... 23  
Table 31: San Diego pre-Covid Hotel Trends ..... 24

**List of Figures**

Figure 1: Economic Impact Flow Chart..... 6  
Figure 2: IMPLAN Modeling Components..... 8  
Figure 3: Shreveport-Bossier City Hotel (non-casino) Occupancy v. National Average..... 22

## **EXECUTIVE SUMMARY**

---

The proposed Turtle Mountain development in Grand Forks, North Dakota is expected to have a significant positive impact on the local Grand Forks area through the creation of new jobs, increased visitation to the area, and a boost to the local tax base and gross domestic product.

The casino is to be owned by the Turtle Mountain Band of Chippewa and branded Harrah's. The resort is to feature a hotel and spa, conference facility, multi-purpose events center featuring esports, a family entertainment center with arcade and bowling, and a gas station/convenience store. Additionally, the development plans include The Giant, a unique interactive attraction that would allow guests to transform their image onto a 120+ foot-tall statue with moving components.

These proposed developments have the potential to recast Grand Forks on a national, or even international scale, while supporting the local economy and complementing existing businesses, entertainment outlets, and cultural/community centers.

### ***Ongoing Annual Impacts***

The Turtle Mountain casino resort is estimated to attract more than 400,000 visitors from outside the local area. Operation of the facility is estimated to require staffing of 812 workers and payroll of \$31.7 million, making it one of the top ten employers in Grand Forks. The resort is projected to add \$71.9 million in value to the Grand Forks economy in direct Gross Domestic Product (GDP).

**Table 1: Turtle Mountain Casino Resort Local Ongoing Impacts**

	<b>Direct</b>	<b>Secondary</b>	<b>Total</b>
<b>Employment</b>	<b>812</b>	<b>164</b>	<b>977</b>
Labor Income (\$MM)	\$31.7	\$8.4	\$40.1
<b>Value Added (GDP in \$MM)</b>	<b>\$71.9</b>	<b>\$11.3</b>	<b>\$83.1</b>
Output (\$MM)	\$97.1	\$22.1	\$119.3

Source: IMPLAN Group, LLC

From those direct effects, the impact ripples out into other sectors of the economy, as workers spend part of their incomes in the local economy (induced effect) and the resort purchases goods and services from local businesses (indirect effect). Adding in these secondary effects leads to an estimated 977 total jobs and GDP value of \$83.1 million.

In addition to the positive economic impacts generated by the casino resort, The Giant attraction is forecasted to contribute to a total of 67 jobs, \$3.6 million in labor income, and GDP value of \$4.6 million.

## Draft

**Table 2: The Giant Local Ongoing Impacts**

	Direct	Secondary	Total
<b>Employment</b>	<b>55</b>	<b>12</b>	<b>67</b>
Labor Income (\$MM)	\$2.4	\$1.2	\$3.6
<b>Value Added (GDP in \$MM)</b>	<b>\$2.7</b>	<b>\$1.9</b>	<b>\$4.6</b>
Output (\$MM)	\$5.9	\$3.8	\$9.7

Source: IMPLAN Group, LLC

Local tax revenue is estimated to increase by \$131,900 as a result of operation of the casino resort. Additionally, it is common in tribal casino trust applications for the parties to approve a Host Community Agreement allowing for the host municipality to receive direct payments from gaming revenue. We estimate that such a payment would result in an annual payment to the City of Grand Forks of approximately \$855,000, for a total annual local fiscal impact of nearly \$1 million.

The State fiscal impact is estimated at \$1.3 million and the federal impact at \$2.9 million.

**Table 3: Tax Impact: Turtle Mountain Casino Resort Ongoing Operations**

<b>Host Community Payment</b>	<b>\$855.0</b>
<b>Local Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$131.9</b>
State Tax Revenues Generated (includes direct, indirect & induced effects)	\$1,287.2
<b>Federal Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$2,919.8</b>

Source: IMPLAN Group, LLC

Tax revenues from the ongoing operations of The Giant attraction include an estimated that \$93,500 that would accrue to local governments annually while \$382,800 of tax revenue is estimated to accrue to the state government. Lastly, \$665,200 of tax revenue is estimated accrue to the federal government.

**Table 4: Tax Impact: The Giant Ongoing Operations**

<b>Local Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$93.5</b>
State Tax Revenues Generated (includes direct, indirect & induced effects)	\$382.8
<b>Federal Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$665.2</b>

Source: IMPLAN Group, LLC

## **Construction Impacts**

Positive economic impacts will occur in the economy even before the developments are open as the Turtle Mountain Casino Resort and The Giant are under construction. In total, the local region is estimated to benefit from a one-time, single-year equivalent employment impact of 2,180 workers, \$143.4 million in labor income and \$165.2 million in total GDP value from the construction of The Turtle Mountain Casino Resort.

*Draft*

**Table 5: Turtle Mountain Casino Resort Local Construction Impacts**

	Direct	Indirect & Induced	Total
<b>Employment</b>	<b>1,527</b>	<b>653</b>	<b>2,180</b>
Labor Income	\$108.4	\$35.0	\$143.4
<b>Value Added (GDP)</b>	<b>\$111.4</b>	<b>\$53.8</b>	<b>\$165.2</b>
Output	\$193.1	\$100.6	\$293.7

Source: IMPLAN Group, LLC

Note: Single-year equivalents.

The construction of the proposed The Giant attraction is forecasted to contribute to a total of 261 jobs, \$18.0 million in labor income, and GDP value of \$20.6 million.

**Table 6: The Giant Local Construction Impacts**

	Direct	Secondary	Total
<b>Employment</b>	<b>182</b>	<b>80</b>	<b>261</b>
Labor Income	\$13.7	\$4.3	\$18.0
<b>Value Added (GDP)</b>	<b>\$14.0</b>	<b>\$6.6</b>	<b>\$20.6</b>
Output	\$24.2	\$12.3	\$36.5

Source: IMPLAN Group, LLC

Note: Single-year equivalents.

One-time tax revenues generated as a result of the construction of The Turtle Mountain Casino Resort include an estimated that \$1.0 million that would accrue to local governments while \$5.8 million of tax revenue is estimated to accrue to the state government. Finally, \$25.6 million of tax revenue is estimated accrue to the federal government.

**Table 7: Tax Impact: Turtle Mountain Casino Resort Construction**

<b>Local Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$1,038.8</b>
State Tax Revenues Generated (includes direct, indirect & induced effects)	\$5,796.0
<b>Federal Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$25,589.2</b>

Source: IMPLAN Group, LLC

One-time tax revenues generated as a result of the construction of The Giant attraction include an estimated that \$111,900 that would accrue to local governments while \$662,300 of tax revenue is estimated to accrue to the state government. Lastly, \$3.2 million of tax revenue is estimated accrue to the federal government.

**Table 8: Tax Impact: The Giant Construction**

<b>Local Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$111.9</b>
State Tax Revenues Generated (includes direct, indirect & induced effects)	\$662.3
<b>Federal Tax Revenues Generated (includes direct, indirect &amp; induced effects)</b>	<b>\$3,209.0</b>

Source: IMPLAN Group, LLC

## **INTRODUCTION**

---

Praxis Strategy Group (“Client”) commissioned The Innovation Group for an Economic Impact Analysis of the proposed Turtle Mountain Casino Resort and The Giant projects in Grand Forks, North Dakota. As detailed throughout this report, the proposed developments are expected to have a significant positive impact on the local Grand Forks area through the creation of new jobs and labor income, increased local gross domestic product (“GDP”) and tax dollars, and increased visitation to the area. The proposed casino and entertainment developments have the potential to recast Grand Forks on a national, or even international scale, while supporting the local economy and complementing existing businesses, entertainment outlets, and cultural/community centers. The report summarizes the economic impacts—including job creation, increases in labor income, and positive revenue impacts for other local businesses, among others—that could be expected from the planned development components.

Development plans for the casino resort include the following components: a casino hotel and spa, conference center, multi-purpose events center featuring esports, family entertainment center with arcade and bowling, and a gas station/convenience store. The casino is to be owned by the Turtle Mountain Band of Chippewa and branded Harrah’s. One other major attraction is being planned: The Giant is a unique interactive attraction that would allow guests to transform their image onto a 120+ foot-tall statue with moving components.

The report begins with a summary of the development cost estimates for the planned building program. We then detail our Economic Impact Analysis, summarizing both our methodology and the corresponding results. Please note, since The Giant represents an unprecedented attraction, we have assessed its economic impact separately.

The assumptions utilized in our analyses as well as important notes and considerations are detailed throughout this report.

## **ECONOMIC IMPACT ANALYSIS**

---

The following section details our Economic Impact Analysis. As noted previously, we have assessed the impact of The Giant separately for both the construction and ongoing operating phases.

### ***Methodology***

The economic benefits—the revenues, jobs, and earnings—that accrue from the annual operations of an enterprise are termed ***ongoing*** impacts. The construction phase of a project is considered a ***one-time*** benefit to an area. This refers to the fact that these dollars will be introduced into the economy only during construction; construction impacts are expressed in single-year equivalence to be consistent in presentation with ongoing annual impacts.

The economic impact of an industry consists of three layers of impacts:

1. Direct effects
2. Indirect effects
3. Induced effects

The **direct effect** is the economic activity that occurs within the industry itself. The direct effect for casino operations represents the expenditures made by the facility in the form of employee compensation and purchases of goods and services (direct expenditures), which ultimately derive from patron spending on the casino floor, and patron spending on non-gaming amenities is an additional direct effect.

**Indirect effects** are the impact of the direct expenditures on other business sectors: for example, the advertising firm who handles a casino’s local media marketing. Indirect effects reflect the economic spin-off that is made possible by the direct purchases of a casino. Firms providing goods and services to a casino have incomes partially attributable to the casino.

Finally, the **induced effects** result from the spending of labor income: for example, casino employees using their income to purchase consumer goods locally. As household incomes are affected by direct employment and spending, this money is recirculated through the household spending patterns causing further local economic activity.

The **total** economic impact of an industry is the sum of the three components.

Determining the direct economic impact is a critical first step in conducting a valid economic impact analysis. Once the direct expenditures are identified, the indirect and induced effects are calculated using multipliers derived from an input-output model<sup>1</sup> of the economy. The IMPLAN

---

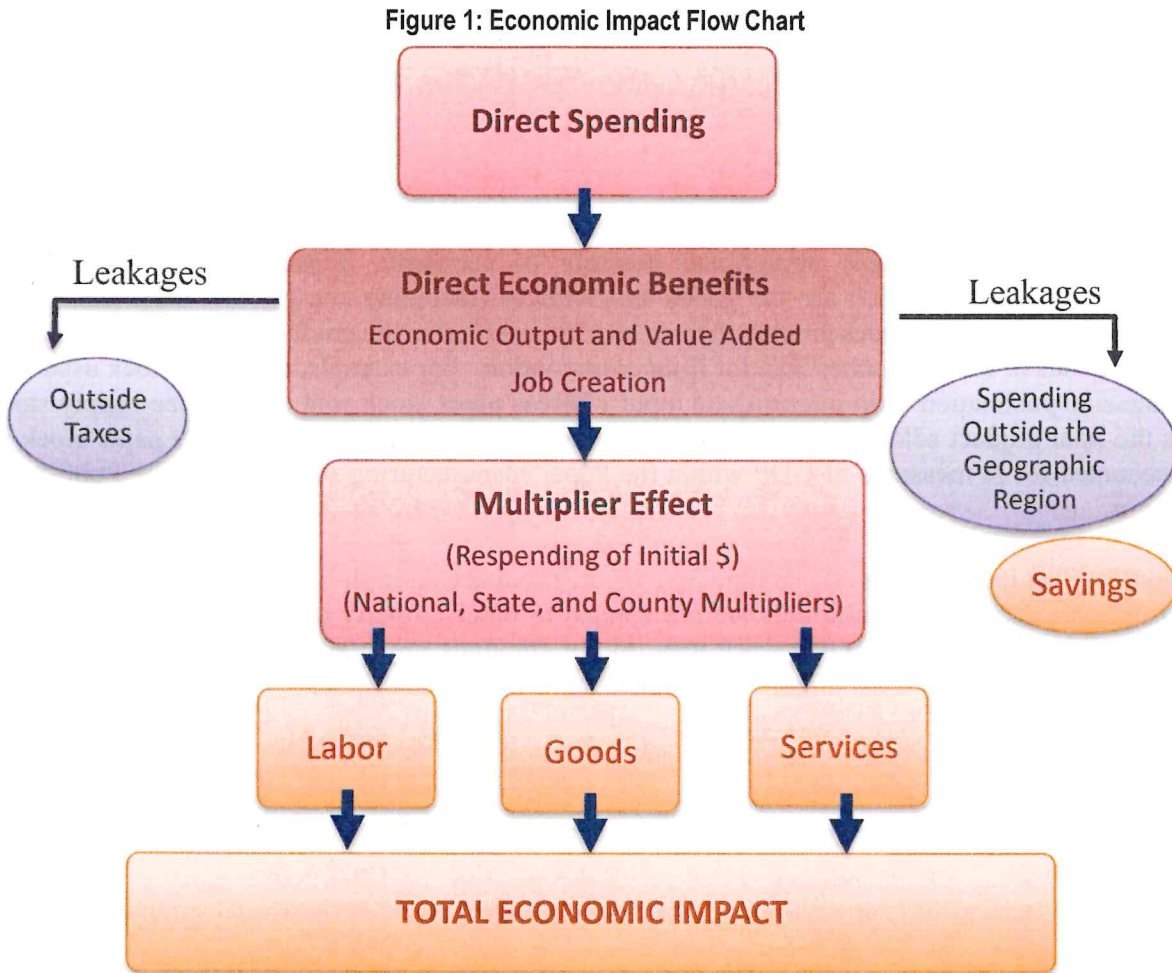
<sup>1</sup> IMPLAN Online software and data were utilized for this study.



*Draft*

input-output model identifies the relationships between various industries. The model is then used to estimate the effects of expenditures by one industry on other industries so that the total impact can be determined. Industry multipliers are developed based on U.S. Census data. IMPLAN accounts closely follow the accounting conventions used in the "Input-Output Study of the U.S. Economy" by the Bureau of Economic Analysis.

The following flow-chart shows how the economic impact model operates.



The IMPLAN analysis expresses impacts (direct, indirect, and induced) for the following four economic variables:

**Employment** is measured in IMPLAN and by the U.S. Census as headcount, in other words the number of full and part-time workers supported by an economic activity.

**Labor Income (LI)** is compensation to all workers both employees and owners in terms of wages and salaries as well as benefits and payroll taxes. Profits from self-employed

## *Draft*

businesses can also be included in this category as compensation to the owner. These are known as employment compensation (EC) and proprietor income (PI) in IMPLAN.  $LI = EC + PI$

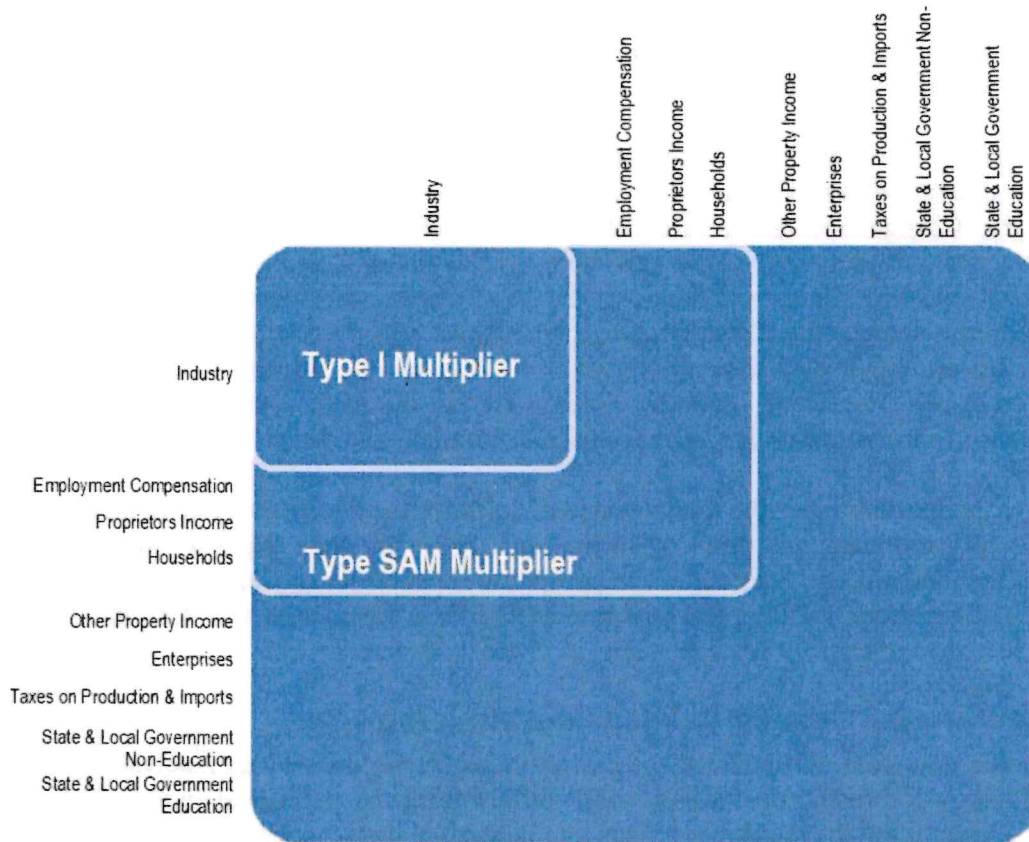
**Value-Added** (VA) measures the industry or event's contribution to Gross Domestic Product (GDP). It consists of labor income (as described above), taxes on production and imports (TOPI), and other property income (OPI, such as corporate profits, rent payments, and royalties). It is the difference between a business or industry's total sales and the cost of all input materials or intermediate expenditures.  $VA = LI + TOPI + OPI$

**Output** is the total value of industry production; it consists of value-added plus intermediate expenditures (IE). Output is frequently the total price paid by consumers for a good or service.  $Output = VA + IE$

Value-Added is the most appropriate measure of economic impact because it excludes intermediate inputs, which are the goods and services (including energy, raw materials, semi-finished goods, and services purchased from all sources) used in the production process to produce *other* goods or services rather than for *final* consumption. For example, the paper stock used in a magazine publication is an intermediate input whereas paper stock sold in an office-supply store is the final product sold to the consumer. The value of producing the magazine's paper stock is accounted for in measures of GDP within the Paper Manufacturing sector, not in the Publishing sector.

However, an industry's use of intermediate inputs produces multiplier or ripple effects in a local or regional economy. Multipliers are not applied to other property income (OPI) and taxes on production and imports (TOPI) since they do not stimulate any additional impacts that can be attributed to the study area. Figure 2 illustrates the IMPLAN multiplier system.

Figure 2: IMPLAN Modeling Components



The U.S. Bureau of Economic Analysis divides effects into Type I (indirect) and Type II (induced) multipliers. Type I measures only business-to-business purchases, or Intermediate Expenditures. Type II measures the effects of local Household spending and Labor Income. SAM (social accounting matrix) multipliers in the IMPLAN systems measure the combined indirect and induced effects.

The IMPLAN sectoring scheme is based on the 6-digit North American Industry Classification System (NAICS), developed under the auspices of the Office of Management and Budget (OMB), which classifies business establishments based on the activities they are primarily engaged in or the commodities they create. IMPLAN's current sectoring scheme aggregates the 2017 version of the NAICS classification scheme down to just 536 industry sectors. When an industry and the commodity produced by the industry have the same name, the commodity is considered the primary product of that industry and will share the same sector code. Other commodities produced by that industry are considered secondary products of that industry. Therefore, it is possible for more than one industry to produce a specific good or service.

## ***Economic Impact Modeling Options***

There are six types of economic activity that IMPLAN is designed to model: Industry Change, Commodity Change, Labor Income, Household Income, Industry Spending Pattern, and Institutional (government) Spending Patterns.

The most commonly used activity is an Industry Change, as the business generating a change in revenue, labor, or employment is often known and attributable to a specific industry sector. When using the Industry Change function, the direct effect values (generally revenue or sales) are entered into IMPLAN using the appropriate sector and IMPLAN calculates the multiplier effects resulting from that direct spending. Industry Change is the most appropriate function for non-gaming amenity operations—hotel, food and beverage, meetings and entertainment, arcade/family entertainment center, bowling, and retail/other—as well as for the ongoing operations of the convenience store and The Giant. Industry Change is also the most appropriate function for modeling the costs associated with land improvements, building, and design related costs.

A Commodity Change distributes the total demand or sales for the good or service as an industry change across all producing industries or institutions, based on their regional market share distribution of that commodity. It is the most appropriate function for modeling costs associated with purchases of Furniture, Fixtures and Equipment (FF&E) in the construction section.

### ***Analysis-by-Parts for Gaming-Related Operating Impacts***

Given the unique operating attributes of the casino industry, we utilized an Analysis-by-Parts (ABP) methodology for casino operations. ABP differs from the traditional Industry Change Activity, as it separates out the multiplier effects into individual impact components, Intermediate Expenditure (indirect impacts from Type I multipliers) and Labor Income (induced impacts from Type II multipliers). This allows for more flexibility and customization capabilities in the analysis to model actual business operations.

For the Labor Income (LI) component we used a Labor Income Change activity to analyze the impact of the payroll of casino operations necessary to meet the demand or production level. The direct input for Labor Income in the casino analysis consisted of Employee Compensation from our operating pro forma models.

For Intermediate Expenditures (IE), we import an Industry Spending Pattern to specify the goods and services of industry purchases needed for the sector 503 - Gambling industries (except casino hotels) in order to satisfy projected casino revenues. The purchase of these goods and services from local sources actually represents the first round of indirect purchases by the casino industry. The coefficients listed in an Industry Spending Pattern represent the amount spent on each commodity to produce one dollar of the industry's output, while the sum of all commodity coefficients equals total intermediate expenditures used by that industry sector.

The Analysis-by-Parts method results in a much more conservative and we believe realistic estimate of the indirect and induced (or multiplier) effects of the operation of the casino component. The inputs into the IMPLAN casino model consist solely of the proforma estimates of employee compensation and purchases by the casino of goods and services. Operating profit is

## *Draft*

excluded from the multiplier effect, although it is included in the displays of direct effects. Since the ABP technique shifts the direct inputs to indirect and induced impact results, the direct effects of these components are imputed using our proforma operating statements.

### ***A Note on Substitution***

Casino development frequently elicits concern that a substitution of consumer spending (the substitution effect) will negatively impact local businesses, especially smaller “mom and pop” retail, restaurant, and other entertainment industries. Intuitively it seems to be logical that spending at a casino would be diverted from other consumer activities such as going to a movie or taking a trip to the beach. However, numerous empirical studies have failed to find any conclusive evidence of significant economic substitution after the introduction of new casinos, nor is there any conclusive evidence as to the amount of spending that is substituted or the industry that it would have otherwise been spent in.

It is likely that countervailing positive effects dilute or outweigh any substitution that occurs. First, there is the increased household income in the area from casino employment. Secondly, there is a substantial body of research and case studies demonstrating the positive impacts that casinos have on surrounding local businesses. A review of studies of casino impacts on local business shows that casinos can stimulate local economies, resulting in communitywide growth, including in the local food and beverage business and retail businesses. Casino visitors stop at local retail outlets and restaurants in addition to some overnight casino guests patronizing local non-casino hotels. More information on local business impacts is contained in the Appendix.

It was determined after careful consideration that any substitution effects that may occur in the county as a result of the development operations would not be modeled in the economic impact analysis.

### ***Ongoing Operations***

The ongoing operations of the developments in Grand Forks will result in ongoing economic benefits that will accrue annually. Direct inputs for the casino development and The Giant were derived from The Innovation Group’s Gaming & Resort Market Assessment.

### ***Operating Inputs***

Direct effect inputs for casino resort and The Giant operations account for the workers employed at the facility and the compensation they earn as well as direct spending (less any promotional rewards or benefits received) by the gaming operations. Staffing and employment compensation estimates were based on The Innovation Group’s operating pro forma model and input into the IMPLAN software. Our staffing model has been calibrated to actual operating data from existing casinos and is on a Full-Time Equivalent (“FTE”) basis. These FTEs were converted into total number of employees (Full and Part-time) using IMPLAN’s conversion matrix, which for the casino sector is 0.82136 FTEs for each employee on a headcount basis.

## Draft

The following tables show the total inputs utilized in the IMPLAN modeling for the Turtle Mountain Casino Resort and The Giant. Please note, relevant values for the assumed second year of operations, or 2026, were used as input values for the direct effect inputs.

**Table 9: Turtle Mountain Casino Resort Direct Effect Inputs – Ongoing Operations (\$000s)**

<b>Industry Spending Pattern &amp; Labor Change</b>	<b>Expenditures (\$000s)</b>	<b>Employment</b>	<b>Labor Income (\$000s)</b>
503 Gambling industries (except casino hotels)	\$13,403.8		
5001 Employment Compensation		429	\$22,773.9
<b>Industry Change</b>	<b>Revenue (\$000s)</b>		
507 Hotel and motels, including casino hotels	\$11,170.2	96	\$2,473.7
509 Full-service restaurants	\$9,030.4	230	\$4,637.4
504 Other amusement and recreation industries*	\$568.6	10	\$238.1
506 Bowling Centers*	\$946.0	15	\$305.9
408 Retail gasoline stores	\$1,048.1	15	\$427.3
496 Performing arts companies	\$2,951.7	16	\$762.6
412 Miscellaneous Store Retailers	\$1,179.3	1	\$45.3

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group.

\*Employment and Labor Income figures generated by IMPLAN

**Table 10: The Giant Direct Effect Inputs – Ongoing Operations (\$000s)**

<b>Industry Change</b>	<b>Revenue (\$000s)</b>	<b>Employment</b>	<b>Labor Income (\$000s)</b>
504 Other amusement and recreation industries	\$5,878.8	55	\$2,420.0

Source: IMPLAN Group, LLC, IMPLAN System (data and software); The Innovation Group.

## Annual Economic Impacts from Operations

The following section presents the ongoing economic impacts resulting from the Turtle Mountain Casino Resort and The Giant operating activities. These impacts occur annually and can be thought of as long-term benefits locally (within Grand Forks County).

Based on the operating data forecasted by The Innovation Group, the operations of the potential Turtle Mountain Casino Resort are estimated to directly support 812 local workers annually, with annual labor income equaling \$31.7 million and total added value to the economy of \$71.9 million. These direct impacts drive a further \$11.2 million in added value to the economy and 165 jobs from indirect and induced effects.

In total, Grand Forks is estimated to benefit from annual employment impacts of 977 workers, \$40.1 million in labor income and \$83.1 million in total value added, as shown in the table below.

*Draft*

**Table 11: Turtle Mountain Casino Resort Local Ongoing Impacts**

<b>Impact Type</b>	<b>Employment</b>	<b>Labor Income (\$MM)</b>	<b>Value Added (\$MM)</b>	<b>Output (\$MM)</b>
Direct Effect	812	\$31.7	\$71.9	\$97.1
Indirect Effect	112	\$5.7	\$7.5	\$15.2
Induced Effect	52	\$2.7	\$3.8	\$6.9
<b>Total</b>	<b>977</b>	<b>\$40.1</b>	<b>\$83.1</b>	<b>\$119.3</b>

Source: IMPLAN Group, LLC

Based on the operating data forecasted by The Innovation Group, the operations of the potential The Giant attraction are estimated to directly support 55 local workers annually, with annual labor income equaling \$2.4 million and total added value to the economy of \$2.7 million. These direct impacts drive a further \$1.9 million in added value to the economy and 12 jobs from indirect and induced effects.

In total, Grand Forks is estimated to benefit from annual employment impacts of 67 workers, \$3.6 million in labor income and \$4.6 million in total value added, as shown in the table below.

**Table 12: The Giant Local Ongoing Impacts**

<b>Impact Type</b>	<b>Employment</b>	<b>Labor Income (\$MM)</b>	<b>Value Added (\$MM)</b>	<b>Output (\$MM)</b>
Direct Effect	55	\$2.4	\$2.7	\$5.9
Indirect Effect	6	\$0.6	\$1.0	\$2.1
Induced Effect	6	\$0.6	\$0.9	\$1.7
<b>Total</b>	<b>67</b>	<b>\$3.6</b>	<b>\$4.6</b>	<b>\$9.7</b>

Source: IMPLAN Group, LLC

## **Fiscal Impacts**

Fiscal impacts from the ongoing operations of the Turtle Mountain Casino Resort and The Giant are estimated by IMPLAN.

### ***Turtle Mountain Casino Resort***

Fiscal impacts resulting from IMPLAN include business taxes, payroll taxes, property taxes, and other relevant taxes locally, statewide, and nationally. Based on the forecasted operations of the Turtle Mountain Casino Resort, IMPLAN estimates local tax revenue of \$131,900.

*Draft*

**Table 13: Local Tax Impact: Turtle Mountain Casino Resort Ongoing Operations (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$0.0	\$0.0	\$0.0	\$0.0
Social Insurance Tax- Employer Contribution	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Sales Tax	\$0.0	\$8.5	\$7.9	\$16.5
TOPI: Property Tax	\$0.0	\$31.4	\$29.1	\$60.5
TOPI: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Severance Tax	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Other Taxes	\$6.8	\$0.9	\$0.8	\$8.6
TOPI: Special Assessments	\$36.8	\$4.9	\$4.6	\$46.3
OPI: Corporate Profits Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Income Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Other Tax (Fish/Hunt)	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$43.6</b>	<b>\$45.8</b>	<b>\$42.4</b>	<b>\$131.9</b>

Source: IMPLAN Group, LLC

As a tribal trust development, the resort would be exempt from sales and property taxes. However, it is common in tribal casino trust applications for the parties to approve a Host Community Agreement allowing for the host municipality to receive direct payments as a percentage of gaming revenue. We estimate that such a payment would result in an annual payment to the City of Grand Forks of approximately \$855,000, for a total annual local fiscal impact of nearly \$1 million.

The fiscal impact to the State is estimated at \$1.3 million.

**Table 14: State Tax Impact: Turtle Mountain Casino Resort Ongoing Operations (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$16.1	\$9.5	\$4.6	\$30.2
Social Insurance Tax- Employer Contribution	\$24.6	\$14.6	\$7.1	\$46.2
TOPI: Sales Tax	\$0.0	\$65.8	\$60.9	\$126.6
TOPI: Property Tax	\$0.0	\$0.1	\$0.1	\$0.3
TOPI: Motor Vehicle License	\$10.1	\$1.3	\$1.2	\$12.7
TOPI: Severance Tax	\$669.9	\$89.8	\$83.1	\$842.8
TOPI: Other Taxes	\$18.5	\$2.5	\$2.3	\$23.3
TOPI: Special Assessments	\$0.0	\$0.0	\$0.0	\$0.0
OPI: Corporate Profits Tax	\$37.1	\$15.9	\$10.1	\$63.1
Personal Tax: Income Tax	\$51.5	\$39.7	\$17.2	\$108.3
Personal Tax: Motor Vehicle License	\$8.4	\$6.2	\$2.7	\$17.3
Personal Tax: Other Tax (Fish/Hunt)	\$7.8	\$6.0	\$2.6	\$16.3
<b>Total</b>	<b>\$843.9</b>	<b>\$251.4</b>	<b>\$192.0</b>	<b>\$1,287.2</b>

Source: IMPLAN Group, LLC

Finally, IMPLAN estimates \$2.9 million of tax revenue would accrue to the federal government.



*Draft*

**Table 15: Federal Tax Impact: Turtle Mountain Casino Resort Ongoing Operations (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$466.6	\$313.5	\$143.6	\$923.8
Social Insurance Tax- Employer Contribution	\$428.0	\$254.1	\$122.9	\$805.0
TOPI: Excise Tax	\$5.3	\$0.7	\$0.7	\$6.7
TOPI: Custom Duty	\$4.3	\$0.6	\$0.5	\$5.5
OPI: Corporate Profit Tax	\$141.7	\$60.6	\$38.7	\$241.0
Personal Tax: Income Tax	\$440.7	\$348.0	\$149.2	\$937.8
Personal Tax: Estate and Gift Tax	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$1,486.8</b>	<b>\$977.5</b>	<b>\$455.6</b>	<b>\$2,919.8</b>

Source: IMPLAN Group, LLC

***The Giant***

Based on the forecasted operations of the The Giant, IMPLAN estimates that \$93,500 of tax revenue would accrue to local governments while \$382,800 of tax revenue would accrue to the state government. Finally, IMPLAN estimates \$665,200 of tax revenue would accrue to the federal government.

**Table 16: Local Tax Impact: The Giant Ongoing Operations (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$0.0	\$0.0	\$0.0	\$0.0
Social Insurance Tax- Employer Contribution	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Sales Tax	\$14.2	\$1.3	\$1.9	\$17.4
TOPI: Property Tax	\$52.3	\$4.8	\$7.0	\$64.1
TOPI: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Severance Tax	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Other Taxes	\$1.5	\$0.1	\$0.2	\$1.9
TOPI: Special Assessments	\$8.2	\$0.8	\$1.1	\$10.1
OPI: Corporate Profits Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Income Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Other Tax (Fish/Hunt)	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$76.3</b>	<b>\$7.1</b>	<b>\$10.2</b>	<b>\$93.5</b>

Source: IMPLAN Group, LLC

*Draft*

**Table 17: State Tax Impact: The Giant Ongoing Operations (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$5.3	\$1.0	\$1.1	\$7.4
Social Insurance Tax- Employer Contribution	\$8.1	\$1.6	\$1.7	\$11.3
TOPI: Sales Tax	\$109.5	\$10.1	\$14.6	\$134.2
TOPI: Property Tax	\$0.2	\$0.0	\$0.0	\$0.3
TOPI: Motor Vehicle License	\$2.2	\$0.2	\$0.3	\$2.8
TOPI: Severance Tax	\$149.5	\$13.8	\$19.9	\$183.2
TOPI: Other Taxes	\$4.1	\$0.4	\$0.6	\$5.1
TOPI: Special Assessments	\$0.0	\$0.0	\$0.0	\$0.0
OPI: Corporate Profits Tax	(\$0.5)	\$2.6	\$2.4	\$4.5
Personal Tax: Income Tax	\$16.9	\$5.0	\$4.1	\$26.0
Personal Tax: Motor Vehicle License	\$2.8	\$0.8	\$0.7	\$4.2
Personal Tax: Other Tax (Fish/Hunt)	\$2.5	\$0.8	\$0.6	\$3.9
<b>Total</b>	<b>\$300.6</b>	<b>\$36.2</b>	<b>\$46.0</b>	<b>\$382.8</b>

Source: IMPLAN Group, LLC

**Table 18: Federal Tax Impact: The Giant Ongoing Operations (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$153.0	\$36.6	\$34.3	\$224.0
Social Insurance Tax- Employer Contribution	\$140.4	\$27.3	\$29.4	\$197.1
TOPI: Excise Tax	\$1.2	\$0.1	\$0.2	\$1.5
TOPI: Custom Duty	\$1.0	\$0.1	\$0.1	\$1.2
OPI: Corporate Profit Tax	(\$1.9)	\$9.8	\$9.2	\$17.1
Personal Tax: Income Tax	\$144.5	\$44.2	\$35.7	\$224.4
Personal Tax: Estate and Gift Tax	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$438.1</b>	<b>\$118.1</b>	<b>\$109.0</b>	<b>\$665.2</b>

Source: IMPLAN Group, LLC

## Construction

Construction of the proposed developments would bring one-time (non-recurring) benefits to Grand Forks. Construction impacts are expressed on a single-year basis. Therefore, the employment figures, for example, represent person-year equivalents; for a construction period of two years, the actual number of workers onsite would be half the person-year equivalent.

The impact of construction only relates to expenditures made directly by the development company to design, build and outfit the physical structure. For construction, architectural, and engineering impacts, the Industry Change function was employed using sectors 55-Construction of New Commercial Structures, Including Farm Structures and 457-Architectural, Engineering, and Related Services. Costs associated with purchases of Furniture, Fixtures and Equipment (FF&E) and machine purchases were modeled using the Commodity Change function sectors 3393-Wholesale Trade Services-Professional and Commercial Equipment and Supplies and 3391-All Other Miscellaneous Manufactured Products.

## Construction Inputs

Based on high-level construction capital costs estimated by the Innovation Group, the following tables outlines the final inputs used to calculate the economic impact by sector. The cost of slot machines was separated out from the other FF&E. IMPLAN estimates what percentage of the purchases, including slot machines, will originate from within the study area based on its Social Accounting Matrix (SAM).

**Table 19: Turtle Mountain Casino Resort Estimated Construction Cost Inputs (\$MM)**

<b>Component</b>	
<b>Industry Change</b>	
55 Construction of New Commercial Structures	\$161.9
457 Architectural, engineering, and related services	\$17.5
<b>Commodity Change</b>	
3393 Wholesale trade services	\$44.2
3391 All other miscellaneous manufactured products	\$23.0
<b>Total Direct</b>	<b>\$246.7</b>

Source: IMPLAN Group, LLC; The Innovation Group

**Table 20: The Giant Estimated Construction Cost Inputs (\$MM)**

<b>Component</b>	
<b>Industry Change</b>	
55 Construction of New Commercial Structures	\$22.5
457 Architectural, engineering, and related services	\$1.5
<b>Commodity Change</b>	
3393 Wholesale trade services	\$6.0
<b>Total Direct</b>	<b>\$30.0</b>

Source: IMPLAN Group, LLC; The Innovation Group

## Draft

### Economic Impacts from Construction

Based on the construction capital costs estimated by The Innovation Group, the IMPLAN model estimates that construction of the Turtle Mountain Casino Resort development will directly support 1,527 workers locally, with labor income equaling \$108.4 million and total added value to the economy of \$111.4 million. These direct impacts drive a further \$53.8 million in added value to the economy and over 650 jobs from indirect and induced effects.

In total, the local region is estimated to have benefited from a one-time, single-year equivalent employment impact of 2,180 workers, \$143.4 million in labor income and \$165.2 million in total value added, as shown in the table below.

**Table 21: Turtle Mountain Casino Resort Local Construction Impacts**

Impact Type	Employment	Labor Income (\$MM)	Value Added (\$MM)	Output (\$MM)
Direct Effect	1,527	\$108.4	\$111.4	\$193.1
Indirect Effect	187	\$12.2	\$17.4	\$34.1
Induced Effect	466	\$22.8	\$36.4	\$66.4
<b>Total</b>	<b>2,180</b>	<b>\$143.4</b>	<b>\$165.2</b>	<b>\$293.7</b>

Source: IMPLAN Group, LLC

Note: Single-year equivalents.

Based on the construction capital costs estimated by The Innovation Group, the IMPLAN model estimates that construction of The Giant attraction will directly support 182 workers locally, with labor income equaling \$13.7 million and total added value to the economy of \$14.0 million. These direct impacts drive a further \$6.6 million in added value to the economy and nearly 80 jobs from indirect and induced effects.

In total, the local region is estimated to benefit from a one-time, single-year equivalent employment impact of 261 workers, \$18.0 million in labor income and \$20.6 million in total value added, as shown in the table below.

**Table 22: The Giant Local Construction Impacts**

Impact Type	Employment	Labor Income (\$MM)	Value Added (\$MM)	Output (\$MM)
Direct Effect	182	\$13.7	\$14.0	\$24.2
Indirect Effect	21	\$1.5	\$2.1	\$4.0
Induced Effect	58	\$2.9	\$4.6	\$8.3
<b>Total</b>	<b>261</b>	<b>\$18.0</b>	<b>\$20.6</b>	<b>\$36.5</b>

Source: IMPLAN Group, LLC

Note: Single-year equivalents.

### Fiscal Impacts

#### *Turtle Mountain Casino Resort*

Fiscal impacts resulting from IMPLAN include business taxes, payroll taxes, property taxes, and other relevant taxes, locally, statewide, and nationally. Based on the construction cost estimates for the Turtle Mountain Casino Resort development, the one-time fiscal impacts from construction

*Draft*

would contribute \$1.0 million, \$5.8 million and \$25.6 million to local, state and federal governments, respectively.

**Table 23: Local Tax Impact from Construction: Turtle Mountain Casino Resort (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$0.0	\$0.0	\$0.0	\$0.0
Social Insurance Tax- Employer Contribution	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Sales Tax	\$70.8	\$47.3	\$75.6	\$193.7
TOPI: Property Tax	\$260.4	\$174.0	\$278.3	\$712.6
TOPI: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Severance Tax	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Other Taxes	\$7.6	\$5.1	\$8.1	\$20.7
TOPI: Special Assessments	\$40.9	\$27.3	\$43.7	\$111.8
OPI: Corporate Profits Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Income Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Other Tax (Fish/Hunt)	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$379.6</b>	<b>\$253.6</b>	<b>\$405.7</b>	<b>\$1,038.8</b>

Source: IMPLAN Group, LLC

**Table 24: State Tax Impact from Construction: Turtle Mountain Casino Resort (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$228.1	\$20.6	\$44.4	\$293.1
Social Insurance Tax- Employer Contribution	\$348.9	\$31.5	\$68.0	\$448.4
TOPI: Sales Tax	\$544.7	\$363.9	\$582.1	\$1,490.6
TOPI: Property Tax	\$1.2	\$0.8	\$1.3	\$3.3
TOPI: Motor Vehicle License	\$11.2	\$7.5	\$11.9	\$30.6
TOPI: Severance Tax	\$743.7	\$496.8	\$794.8	\$2,035.3
TOPI: Other Taxes	\$20.5	\$13.7	\$21.9	\$56.2
TOPI: Special Assessments	\$0.0	\$0.0	\$0.0	\$0.0
OPI: Corporate Profits Tax	\$10.0	\$33.1	\$97.2	\$140.4
Personal Tax: Income Tax	\$730.6	\$93.1	\$165.3	\$989.1
Personal Tax: Motor Vehicle License	\$119.5	\$14.2	\$26.2	\$159.9
Personal Tax: Other Tax (Fish/Hunt)	\$110.1	\$14.0	\$24.9	\$149.1
<b>Total</b>	<b>\$2,868.5</b>	<b>\$1,089.2</b>	<b>\$1,838.2</b>	<b>\$5,796.0</b>

Source: IMPLAN Group, LLC

*Draft*

**Table 25: Federal Tax Impact from Construction: Turtle Mountain Casino Resort (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$6,620.7	\$706.4	\$1,382.2	\$8,709.4
Social Insurance Tax- Employer Contribution	\$6,072.7	\$547.8	\$1,183.3	\$7,803.7
TOPI: Excise Tax	\$5.9	\$4.0	\$6.3	\$16.3
TOPI: Custom Duty	\$4.8	\$3.2	\$5.1	\$13.2
OPI: Corporate Profit Tax	\$38.3	\$126.5	\$371.4	\$536.2
Personal Tax: Income Tax	\$6,252.5	\$822.1	\$1,436.0	\$8,510.5
Personal Tax: Estate and Gift Tax	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$18,994.8</b>	<b>\$2,210.0</b>	<b>\$4,384.4</b>	<b>\$25,589.2</b>

Source: IMPLAN Group, LLC

***The Giant***

Based on the construction cost estimates for The Giant attraction, the one-time fiscal impacts from construction would contribute \$111,900, \$662,300, and \$3.2 million to local, state and federal governments, respectively.

**Table 26: Local Tax Impact from Construction: The Giant (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$0.0	\$0.0	\$0.0	\$0.0
Social Insurance Tax- Employer Contribution	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Sales Tax	\$5.2	\$6.2	\$9.5	\$20.9
TOPI: Property Tax	\$19.1	\$22.7	\$34.9	\$76.7
TOPI: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Severance Tax	\$0.0	\$0.0	\$0.0	\$0.0
TOPI: Other Taxes	\$0.6	\$0.7	\$1.0	\$2.2
TOPI: Special Assessments	\$3.0	\$3.6	\$5.5	\$12.0
OPI: Corporate Profits Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Income Tax	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Motor Vehicle License	\$0.0	\$0.0	\$0.0	\$0.0
Personal Tax: Other Tax (Fish/Hunt)	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$27.8</b>	<b>\$33.1</b>	<b>\$50.9</b>	<b>\$111.9</b>

Source: IMPLAN Group, LLC

*Draft*

**Table 27: State Tax Impact from Construction: The Giant (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$28.8	\$2.4	\$5.6	\$36.8
Social Insurance Tax- Employer Contribution	\$44.1	\$3.7	\$8.5	\$56.3
TOPI: Sales Tax	\$39.9	\$47.6	\$73.0	\$160.5
TOPI: Property Tax	\$0.1	\$0.1	\$0.2	\$0.4
TOPI: Motor Vehicle License	\$0.8	\$1.0	\$1.5	\$3.3
TOPI: Severance Tax	\$54.5	\$64.9	\$99.7	\$219.1
TOPI: Other Taxes	\$1.5	\$1.8	\$2.8	\$6.1
TOPI: Special Assessments	\$0.0	\$0.0	\$0.0	\$0.0
OPI: Corporate Profits Tax	\$0.9	\$3.8	\$12.2	\$17.0
Personal Tax: Income Tax	\$92.3	\$11.1	\$20.7	\$124.1
Personal Tax: Motor Vehicle License	\$15.1	\$1.7	\$3.3	\$20.1
Personal Tax: Other Tax (Fish/Hunt)	\$13.9	\$1.7	\$3.1	\$18.7
<b>Total</b>	<b>\$291.9</b>	<b>\$139.8</b>	<b>\$230.6</b>	<b>\$662.3</b>

Source: IMPLAN Group, LLC

**Table 28: Federal Tax Impact from Construction: The Giant (\$000)**

Description	Direct	Indirect	Induced	Total
Social Insurance Tax- Employee Contribution	\$836.1	\$83.8	\$173.4	\$1,093.3
Social Insurance Tax- Employer Contribution	\$766.9	\$64.8	\$148.4	\$980.0
TOPI: Excise Tax	\$0.4	\$0.5	\$0.8	\$1.7
TOPI: Custom Duty	\$0.4	\$0.4	\$0.6	\$1.4
OPI: Corporate Profit Tax	\$3.6	\$14.7	\$46.6	\$64.9
Personal Tax: Income Tax	\$789.6	\$97.9	\$180.1	\$1,067.6
Personal Tax: Estate and Gift Tax	\$0.0	\$0.0	\$0.0	\$0.0
<b>Total</b>	<b>\$2,396.9</b>	<b>\$262.2</b>	<b>\$549.9</b>	<b>\$3,209.0</b>

Source: IMPLAN Group, LLC

## **APPENDIX: LOCAL BUSINESS BENEFITS**

---

There is a substantial body of research and case studies demonstrating the impacts that casinos have on surrounding local businesses. There are several important reasons that local businesses benefit from the development of a casino:

- Casino visitors stopping at local retail outlets and restaurants.
- Long-distance patrons staying at area hotels; even in markets with casino hotels, non-casino hotels enjoy boosts in occupancy.
- Casino expenditures on local goods and services put more money into the local economy.

A review of studies of casino impacts on local business shows that casinos can stimulate local economies, resulting in communitywide growth, including in the local food and beverage business and retail businesses. There is little evidence of significant economic substitution after the introduction of new casinos, particularly for casinos in urban areas.

### ***Primary Research***

Casino development increases room demand at non-casino hotels even when casino hotels are built. For example, in Shreveport-Bossier City, Louisiana, hotel occupancy rates averaged approximately 60% before casinos were developed beginning in 1994, which is a standard level of occupancy for a small city market without casinos. The Shreveport-Bossier City casino industry was fully developed by 2003 with six casinos featuring 9,500 gaming positions, by which time hotel occupancy in non-casino hotels had risen to 63%, climbing to 74% by 2005.<sup>2</sup>

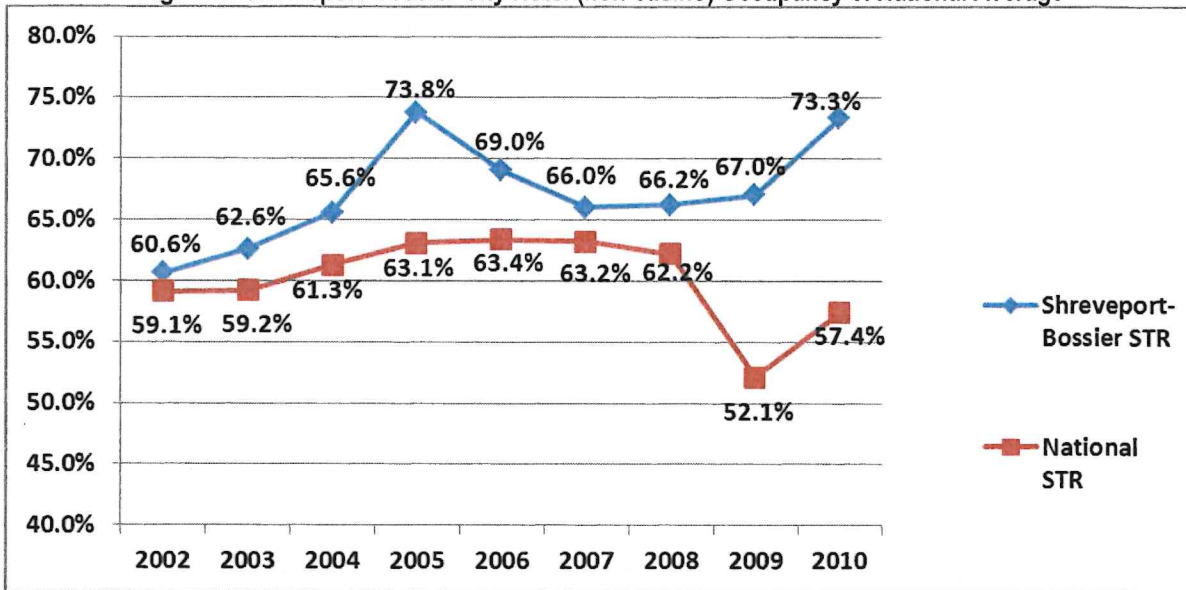
The casino industry also helped non-casino hotels in Shreveport-Bossier City weather the impacts of the Great Recession much better than the national hotel market, with hotel occupancy dropping to no lower than 66% compared to the national trough of 52%.

---

<sup>2</sup> Shreveport-Bossier Convention and Tourism Bureau 2011 Lodging Report.



Figure 3: Shreveport-Bossier City Hotel (non-casino) Occupancy v. National Average



Source: Shreveport-Bossier Convention and Tourism Bureau 2011 Lodging Report; Smith Travel Research

Such a boost to non-casino hotel demand results from the overall increased visitation to the area and the overflow from peak periods when casino hotels are fully booked. On the Mississippi Gulf Coast, gaming began in late 1992 and by the early 2000's there were 11 casinos, all but one of which had associated hotels. During this period, occupancy rates in non-casino hotels remained steady at 55% despite a 143% increase in total rooms, including a 60% increase in non-casino hotel rooms.<sup>3</sup>

The overflow effect has been experienced in numerous jurisdictions beyond the Mississippi and Shreveport examples presented above. In fact, third-party developers frequently build new hotels in the vicinity of a casino to take advantage of that overflow, even in remote areas with no other organic sources of demand. For example, an Americas Best Value Inn, a Best Western and a Days Inn were developed next to the Coushatta Casino Resort in Kinder, Louisiana even though the remote casino property has over 950 rooms of its own.

Gaming development on the Mississippi Gulf Coast also boosted retail and restaurant development by local business owners taking advantage of the increased visitation to the area. As the following table shows, between 1991 and 1997 the number of retail and eating and drinking establishments increased in the two counties that host casinos. The increases were an astounding 77 percent for drinking and dining establishments in Hancock County while retail establishments in both counties also increased over this period.

<sup>3</sup> Source: Mississippi Gaming Commission.

*Draft*

**Table 29: Change in Retail and Eating and Drinking Establishments 1991-1997**

County	Retail	Eating and drinking places
Harrison County, MS	14.7%	4.2%
Hancock County, MS	6.6%	77.1%

Source: US Census County Business Patterns

On the West Coast, three separate data sources indicate that substantial hotel development at tribal casinos on the outskirts of San Diego (and not within the City) has not negatively impacted local hotels. The Transient Occupancy Tax (TOT) collected by the City of San Diego has grown substantially since recovering from the 2009-10 recession effects, despite the operation of several large rural casino hotels, including an 1,100-room hotel at Harrah’s Rincon, that do not pay the TOT.

**Table 30: City of San Diego, CA Transient Occupancy Tax Collections (MMs)**

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
\$160.24	\$136.32	\$128.11	\$139.77	\$150.82	\$157.03	\$170.17	\$186.24	\$202.80	\$221.10

Source: San Diego Tourism Authority

While some of the TOT increase may be related to collection of the TOT at AirBnBs beginning in 2015, hotel occupancy data—which do not include AirBnBs—also increased in the three years from 2014 to 2016. HVS reports that hotel demand and occupancy in the San Diego market “increased steadily from 2010 through 2018, resulting in peak occupancy levels above 78% by year-end 2018.” RevPAR (revenue per available room, a measure of hotel performance) has also seen steady increases since the recession, rising above \$130 for the first time in 2018.<sup>4</sup>

This HVS report is corroborated by STR data for the San Diego market, data that excludes casino properties, as shown in the following table.

---

<sup>4</sup> [http://hvi.hvs.com/market/united-states/San\\_Diego](http://hvi.hvs.com/market/united-states/San_Diego); accessed June 2, 2022.

**Table 31: San Diego pre-Covid Hotel Trends**

	Occupancy %	RevPAR \$	Room Revenue (\$MMs)
2012	73.3	100.27	1,377
2013	74.0	103.22	1,414
2014	76.6	112.00	1,534
2015	78.5	122.23	1,674
2016	79.3	126.62	1,768
2017	79.2	130.47	1,844
2018	80.9	138.44	1,951
2019	78.7	134.84	1,937

Source: STR; The Innovation Group

## ***Secondary Research***

Casino development sometimes elicits concern, which research has dispelled, that substitution of consumer spending (the substitution effect) will impact local businesses, especially smaller “mom and pop” retail, restaurant and entertainment businesses. This argument has its origins in long-ago controversies regarding Atlantic City. Clyde Barrow, Director for the Center of Policy Analysis at the University of Massachusetts Dartmouth, traces the Atlantic City “myth” to a misinformation campaign by the Atlantic City Restaurant and Tavern Association “to win more concessions for its members from the city’s casino hotels.”<sup>5</sup>

Research by Kathryn Hashimoto and George Fenich found that contrary to a negative impact, casinos in Atlantic City actually reversed a downward trend:

The number of eating and drinking establishments in Atlantic County was actually declining in the years *prior* to the opening of the first casinos. However, this decline was actually reversed after the first casinos opened, when the number of non-casino eating and drinking places increased from 415 in 1978 to 569 in 1994 (37 percent). Moreover, in the 11 years since the Hashimoto and Fenich study, the number of non-casino eating and drinking places in Atlantic County has continued to increase to 625 (9.8 percent) in 2004 with 9,020 employees (36 percent).<sup>6</sup>

In a review of available literature, the research division of the Federal Reserve Bank of St. Louis concluded in a 2003 report that the results are “mixed” regarding the impacts of casinos on other local businesses. The report references one study that “found that the growth in retail sales tax collections from various industries slowed after the introduction of casino gambling.” However,

---

<sup>5</sup> Barrow, Clyde and Mathew Hirshy. “The Persistence of Pseudo-Facts in the U.S. Casino Debate: The Case of Massachusetts” *Gaming Law Review and Economics* Volume 12, Number 4, 2008.

<sup>6</sup> *Ibid.*

## *Draft*

another referenced study from Indiana showed that casino development retained spending by patrons “who would have, without the casino, spent their money outside of the local area.”<sup>7</sup>

Furthermore, there is substantial economic research from throughout the country contradicting the substitution effect. Hashimoto and Fenich’s 1997 research shows that “in jurisdictions from the seashore to the riverfront to rural areas, north and south, east and west, local restaurants tended to thrive after a casino opened nearby.” Furthermore, Hashimoto and Fenich conclude: “When casinos are developed, all aspects of the local food and beverage business increase: the number of establishments increases, the number of people employed increases and payroll increases at an even greater rate than the first two.”<sup>8</sup>

Research conducted in 1996 by Nancy Reeves and Associates for the Mille Lacs Band of Ojibwe, entitled “The Economic Impact of Grand Casino Mille Lacs and Grand Casino Hinckley on Their Surrounding Areas” concluded that:

At least 15 businesses have either opened, expanded, or re-opened since the opening of Grand Casino Mille Lacs. Included are 4 hotels/motels and resorts, 8 restaurants and fast food establishments, 2 gas stations and a go-kart track. Together, these businesses have added an estimated 142 jobs in the area.

With the opening of Grand Casino Hinckley in 1992, the hospitality business in Hinckley was transformed from a rest stop for travelers to a tourist destination. In addition to the casino complex, with its 1,275 jobs, Hinckley has added 11 new businesses and expanded 4 more since 1992, adding 87 new jobs. As is the case in the Mille Lacs area, Hinckley is now a year round destination because of the casino. Also similar to the Mille Lacs situation, the main street businesses in Hinckley have seen increases in customer spending attributed primarily to casino employees living in the area.

The Center for Policy Analysis University of Massachusetts Dartmouth came to similar conclusions analyzing a number of gaming jurisdictions throughout the country. The number of restaurants and retail sales excluding those from casinos increased in Bossier City, Louisiana; Biloxi/Gulfport, Mississippi; Connecticut; Gilpin County, Colorado, and; Tunica County, Mississippi.

There was a net increase of eight restaurants in Bossier City, Louisiana following the introduction of riverboat casinos. The city’s taxable restaurant sales, excluding restaurants in the hotels and casinos, increased by 5 percent in 1994 and by 7 percent in 1995 *after* the introduction of riverboat casinos. In Biloxi/Gulfport, Mississippi, the rate of non-casino

---

<sup>7</sup> Thomas A. Garrett, Senior Economist, Federal Reserve Bank of St. Louis, *Casino Gambling in America and Its Economic Impacts*, August 2003.

<sup>8</sup> George Fenich and Kathryn Hashimoto, “The Effects of Casinos on Local Restaurant Business,” paper presented at the International Conference on Gambling and Risk-Taking, Montreal, 1997.

## *Draft*

retail sales growth increased from an average of 3 percent annually (1990-1992) in the years prior to riverboat gambling to 12 percent annually in the years after riverboat gaming began in the locality.

...the number of restaurants in the area surrounding Foxwoods and Mohegan Sun increased from 472 to 506 following the casino's opening, while restaurant employment increased from 5,911 to 6,628 during the same period.... In Gilpin County Colorado, the number of restaurants increased from 31 to 40 after the introduction of casino gaming. In Tunica County, Mississippi, the number of restaurants increased by 13 percent and restaurant employment grew by 9 percent after the introduction of casino gaming in the county.<sup>9</sup>

Similar conclusions have been reached in other studies:

- Even after accounting for substitution effect, economists at the University of Missouri and Washington University concluded that casino gambling in Missouri had a net positive annual impact on Missouri output of \$759 million, corresponding to a continuing higher level of employment of 17,932 jobs generating \$508 million more in personal income.<sup>10</sup>
- A multijurisdictional analysis of retail spending found that in Biloxi/Gulfport, Miss., annual retail sales growth rates increased an average of 3 percent per year from 1990 to 1992, the year when casinos were introduced. Between 1993 and 1995, retail sales jumped 13 percent. In Will County, Ill., retail sales growth trailed statewide trends until 1992, when riverboat casinos were introduced in the local economy. But each year between 1992 and 1995, retail sales growth in Will County exceeded the state rate. In Shreveport/Bossier City, La., retail sales increased by more than 10 percent during 1994, the year that riverboat casinos opened, as the region enjoyed the highest retail sales increase in more than a decade.<sup>11</sup>

In summary, there is a wealth of evidence contradicting the proposition that gaming substitutes for other expenditures. The positive spillover effect on local hotels for one is unequivocally demonstrated in numerous jurisdictions, even in markets where casinos operate hotels for their gaming customers.

---

<sup>9</sup> Ibid.

<sup>10</sup> Charles Leven et al., "Casino Gambling and State Economic Development," paper presented at the Regional Science Association, 37th European Congress, Rome, Aug. 26-29, 1997.

<sup>11</sup> Arthur Andersen, *Economic Impacts of Casino Gaming in the United States, Volume 2: Micro Study* (Washington, D.C.: American Gaming Association, May 1997).

## **DISCLAIMER**

---

Certain information included in this report contains forward-looking estimates, projections and/or statements. The Innovation Group has based these projections, estimates and/or statements on our current expectations about future events. These forward-looking items include statements that reflect our existing beliefs and knowledge regarding the operating environment, existing trends, existing plans, objectives, goals, expectations, anticipations, results of operations, future performance and business plans.

Further, statements that include the words "may," "could," "should," "would," "believe," "expect," "anticipate," "estimate," "intend," "plan," "project," or other words or expressions of similar meaning have been utilized. These statements reflect our judgment on the date they are made and we undertake no duty to update such statements in the future.

Although we believe that the expectations in these reports are reasonable, any or all of the estimates or projections in this report may prove to be incorrect. To the extent possible, we have attempted to verify and confirm estimates and assumptions used in this analysis. However, some assumptions inevitably will not materialize as a result of inaccurate assumptions or as a consequence of known or unknown risks and uncertainties and unanticipated events and circumstances, which may occur. Consequently, actual results achieved during the period covered by our analysis will vary from our estimates and the variations may be material. As such, The Innovation Group accepts no liability in relation to the estimates provided herein.