REC | Regional Economic Consulting Group

November 11th, 2020

Dominic Calabro
President & CEO
Florida TaxWatch
106 N. Bronough St.
Tallahassee, FL 32301

Mr. Calabro,

We would like to thank you for giving us the opportunity to undertake this Liability Shield project to estimate and analyze its economic impacts on Florida's economy. The project was challenging, and the firm has worked many hours to quantify how these concern over litigation due to COVID-19 translate into a lack of hiring and job loss, and its ensuing effects on the economy.

This has been a great learning experience for the firm, as well as allowing us to build upon our own experience and show our capabilities as consultants. The firm is sending both a hard copy and digital files. We will email a PDF, a Word doc, and Excel files as a part of the finished product. We will also send a you hard copy on Monday through overnight mail.

Once again, we would like to thank you all at the Florida TaxWatch for your business. We enjoy working with you and your staff and we hope to be working with you again in the near future.

Best Regards

-The Regional Economic Consulting Group.

Dr. Clyde Diao

Mr. Jared Parker

REC | Regional Economic Consulting Group

# Analysis of the Effects of Liability Shield on Florida's Economy

## A Florida TaxWatch Project

Submitted to:

Dominic Calabro

President and CEO

Prepared by

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November 10, 2020

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# Executive Summary

The COVID-19 pandemic has not just claimed more than 230,000 lives but has also wrought havoc on employers as it spread like wildfire across the country and the world. It resulted in major slowdowns, forcing businesses to either temporarily or completely shut down. Like many other states, Florida imposed a shutdown to slow the spread of the virus. As the number of cases and deaths declined, the shutdown in Florida was gradually lifted beginning May 4, 2020, resulting in a slow economic recovery. Now that Florida's economy has been fully opened, the recovery has started to improve but it is still far below levels experienced before the pandemic. More than 539,000 Floridians have lost their jobs since March 2020 and thousands of businesses have also temporarily or completely shut down. The virus has caused major disruptions in the economy. Many consumers are concerned with personally becoming infected while many employers are concerned over legal liability involving either customers or worker infections arising from interactions and exposures in their business establishments. Florida TaxWatch, through the REC Group, has conducted this study to estimate the economic impacts of the concern over potential litigation from employers if no liability shield is provided. The study aims to determine and analyze the Florida economic impacts of litigation concern, concern of employers from being sued due to COVID-19. The analysis involves estimating the effects of this concern per industry on the state's Gross Domestic Product, employment, labor and business income, and state and local tax revenues.

The study starts with the premise that employer's behavior whether to increase or decrease its workforce depends upon how consumer feels about the economy in light of the pandemic. The concept of elasticity was used to measure the responsiveness of the demand for labor to the change in consumer sentiment in order to determine the employment loss as a result of employer concern from being sued. Using an economic model, IMPLAN, the study estimates the direct, indirect and induced impacts. The results show that the maximum impacts are large when taking into account the various impact categories. The maximum loss in employment is estimated at 208,731 jobs lost across all industries. This employment loss results in -$14.7 billion hit on Personal Income. Based on second quarter from the Florida Economic Estimating Conference, this translates to a -1.3% loss in Personal Income. Total GDP loss amounts to -$16.1 billion which is -1.6% of GDP in the 2$^{nd}$ quarter. Tax collection for both the state and local governments is also expected to take a hit close to -$1.5 billion. The largest impact comes from loss of revenues from sales tax estimated at -$765 million.

Overall, the findings show that the economic impacts of employer concern due to potential litigation from COVID-19 are significant and act as a drag on the economy to operate at its full potential.

# Analysis of the Effects of Liability Shield on Florida's Economy

## A Florida TaxWatch Project

### by the Regional Economic Consulting (REC) Group

## I. Introduction

The COVID-19 pandemic has affected consumers and employers alike as the virus spread like wildfire and ravaged the economy. Slowly the economy is gradually beginning to recover but it is still far below levels experienced before the pandemic. More than 539,000 Floridians have lost their jobs since March 2020 and thousands of businesses have also temporarily or completely shut down. The virus has caused major disruptions in the economy, many consumers are concerned with personally becoming infected while many employers are concerned over legal liability involving either customers or worker infections arising from interactions and exposures in their business establishments. Florida TaxWatch, through the REC Group, has conducted this study to estimate the economic impacts of the concern over potential litigation from employers if no liability shield is provided.

## II. Brief Background

COVID-19 has affected the nation like no other pandemic, going as far back as the Influenza Pandemic of 1918, also referred to as the Spanish Flu. The contagion is a novelle virus and it is unclear to the extent of the spread and effects on humans. It did not take long to reach the US after its discovery in Wuhan, China and the virus subsequently spread rapidly across the nation. As a result, there are more than 9 million cases in the US and over 230,000 deaths so far. These numbers are rising as the weather starts to get colder and as states have begun to open back up their economies. In Florida, the number of cases has reached more than 800,000 and the death toll has hit close to 17,000 and counting[1]. Early reactions to the virus' spread consisted of state economies, including Florida, locking down to control the disease. This had a devastating blow on businesses, particularly small business. Thousands of establishments have completely shut down or have temporarily shut down. In Miami-Dade and the Fort Lauderdale area alone, roughly 3,000 establishments have temporarily closed from March through July, and over 700 businesses have completely shuttered their operations. Consequently, unemployment hit record numbers seen only during the Great Depression. Since March 2020, the US has lost more than 11.5 million jobs. Florida has lost over 539,000 to date, after losing more than a million jobs in April of this year.[2] In order to help unemployed workers and struggling businesses, the US government introduced the Coronavirus Aid, Relief, and Economic Security Act, also known as

1 Center for Systems Science and Engineering (CSSE) at Johns Hopkins University

[2] US Bureau of Labor Statistics, September 2020.

the CARES Act. It is a $2.2 trillion economic stimulus bill passed by the 116th U.S. Congress and signed into law by President Donald Trump on March 27, 2020. In response to the economic fallout of the COVID-19 pandemic in the United States, the Act is an initial measure to mitigate the sufferings of workers and businesses for a short period of time. Another economic stimulus, which was already approved by the House, is expected to follow but its approval has been mired by politics and infighting within the US Congress.

The number of cases began to fall during summer and most states slowly reopened while following the CDC guidelines. Some states were more aggressive in reopening, such as Georgia who opened quickly to reduce the economic fallout. The US economy grew 7.4% in the third quarter of 2020 as measured by the Gross Domestic Product. While it was impressive by any standard, the economy still has a long road ahead in recovery to prior levels before the pandemic. On September 25th, Florida Governor Ron DeSantis ordered the opening of the state's economy at 100% immediately. Businesses were no longer barred from operating at full capacity. Many businesses voluntarily imposed measures to reduce potential contamination among its workers and among its customers. They required the use of masks and kept social distance between people. It is a safe way of tackling coronavirus while at the same time reopening and conducting business.

As the economy is recovering from the economic slowdown, business establishments are also confronted with the possibility of being sued by customers or workers who, as a result of interaction within their establishments, have either become infected or could be potentially exposed and experience the consequences of the virus. This concern is legitimate as the number of cases has increased significantly with Florida's economy opening back to 100%. Lawsuits can be expensive, especially to businesses that are still struggling financially. The potential liability from cases filed against a business can be devastating. The concern has an effect where several businesses are voluntarily not operating at full capacity despite the fact that they are allowed to do so. The US Senate is proposing the "Safe to Work Act" which creates a liability shield for employers, health care workers, and others to discourage insubstantial lawsuits relating to COVID-19 while preserving the ability of individuals and businesses that have suffered real injury to obtain complete relief.[3]

The proposal would provide broad protection to businesses, healthcare providers, schools and universities, and religious, philanthropic, and other nonprofit institutions from liability arising from claims of personal injury due to actual or potential COVID-19 exposure. In addition, it would limit or bar coronavirus-related claims against employers under several specific federal employment laws. Although the legislation would not bar all coronavirus-related claims, the risk of monetary penalties for pursuing claims later deemed meritless and the stringent procedural requirements to pursue a claim could discourage all but the most intrepid aggrieved plaintiff from suing[4].

[3] Safe to Work Act, a 116th US Senate proposal in the stimulus package, July 27, 2020.

[4] Ibid

The Senate sponsors and other proponents argue that the Act is necessary to limit or eliminate the risk of expensive litigation that they assert would deter businesses and other entities from reopening, jeopardize the nation's recovery from the pandemic, and put at risk the investment of taxpayer dollars under the CARES Act[5]. The proponents further argue that healthcare workers and facilities need and deserve a liability shield to allow them to defeat the virus. Opponents, in contrast claim the Act would eliminate an important incentive for individuals and entities to comply with government standards and guidelines intended to protect workers and the public. Opponents contend the Act would leave vulnerable individuals who are exposed to the coronavirus without recourse if they suffer harm because of lax compliance.[6]

Congress continues to debate the SAFE TO WORK Act, and many states have already passed laws designed to provide employers and others with a legal shield against COVID-19 related lawsuits. States passing legislation include Ohio, Georgia, Idaho, Iowa, Kansas, Louisiana, Mississippi, North Carolina, Oklahoma, Tennessee, Utah, and Wyoming. Other states, Indiana, are actively considering legislation.[7]

The current state of uncertainty complicates the calculus for employers. Many employers that are trying to keep their businesses safe still worry about potential liability for failing to control a virus that the entire world is facing. They are concerned as COVID-19 related lawsuits against employers have begun to spread all over the country. As a result, employers are voluntarily not completely opening or operating at full capacity for concern of being sued or liable for a potential COVID-19 infection that customers or workers may get from their establishment.

## III. Objectives

The study aims to determine and analyze the Florida economic impacts of litigation concern, concern of employers from being sued due to COVID-19. The study will estimate the effects of this concern on the state's Gross Domestic Product, employment, labor and business income, and state and local tax revenues. The study does not measure the effects of the entire economic slowdown caused by other economic factors, but focuses on the portion of the economic decline resulting from the employers' pessimism regarding the virus.

## IV. Methodology and Sources of Data

The study utilizes the concept of elasticity, which measures the responsiveness of the change in labor demand to the change in consumer sentiment. Since the study deals with employer's

[5] Ibid

[6] "The Safe To Work Act: An In-depth Guide for Employers to the Senate's Proposed Coronavirus Liability Shield", Jamie Schulman, Morrison and Foerster, August 11, 2020.

[7] "States Provide Shield Against COVID-19 Suit", Ice Miller, Build Insights, September 15, 2020.

behavior due to a concern and pessimism of being legally liable to COVID-19 exposure, the researchers looked at the relationship between the change in labor demand to the change in consumer sentiments. The study utilizes the University of Florida Bureau of Business and Economic Research Consumer Sentiment Index (CSI) which measures how consumers perceive the current status of the economy. The economic variable measures consumers' psychology about the direction of the economy. If the economy is vibrant, the CSI goes up and this results in higher demand for workers. And if the CSI goes down, the demand for labor also slows if not declines. The relationship of labor demand and consumer sentiment measures how labor demand behaves when consumer sentiment changes. The relationship also affects consumer demand and business activities.

The study begins with the premise that a strong consumer sentiment leads to a strong vibrant economy and higher demand for workers. However, consumer sentiment only explains part of the increases and decreases in employment. From the employer's perspective, they maintain their own outlook and how vibrant the economy may or may not be depending upon how the consumers behave and their own future forward looking plans and considerations. This study is based on the premise that employment is determined by a combination of consumer sentiment and a variable termed employer sentiment. Employer sentiment is the difference in responsiveness occurring between consumer sentiment and actual employment levels.

If the CSI is up because consumers feel good about the economy, businesses expand their operation by hiring more workers to meet the increased demand. Businesses likewise lay off workers if demand softens when consumers do not feel good about the economy. Using the difference between the projected employment tied to consumer optimism and the actual employment levels, the study is able to estimate the portion of the change in the number of jobs attributable to employers' concern over litigation, and their economic outlook. The study looks at the effects on employment to determine the impacts on GDP, employment, income, and tax revenues. The change in employment numbers per industry attributable to employer sentiment are used as inputs to the IMPLAN model to determine the direct, indirect and induced impacts.

The study uses data from the US Bureau of Labor Statistics, the US Bureau of Economic Analysis, the UF Bureau of Economic and Business Research, the Legislative Office of Economic and Demographic Research and the Florida Economic Estimating Conference. The study uses the IMPLAN model for Florida to estimate the impacts.

## V. Results, Findings and Analysis

**Table I**

| Total Nonfarm Employment Impact | | | |
|---|---|---|---|
| **Date** | **Consumer Sentiment Effect on Jobs** | **Employment Change** | **Employer Sentiment Effect on Jobs** |
| Mar-20 | (488,070) | (95,300) | 392,770 |
| Apr-20 | (308,735) | (1,082,800) | (774,065) |
| May-20 | 10,358 | 207,400 | 197,042 |
| Jun-20 | 221,024 | 286,900 | 65,876 |
| Jul-20 | (71,097) | 79,300 | 150,397 |
| Aug-20 | (62,372) | 18,000 | 80,372 |
| Sep-20 | 286,173 | 47,400 | (238,773) |
| **Total** | **(412,719)** | **(539,100)** | **(126,381)** |

Table I displays three variables: the effect of consumer sentiments on jobs, the effect of employer sentiments on jobs, and the total change in employment. The consumer sentiment's effect on jobs describes what the change in employment would look like if employment were purely driven by consumer sentiment barring any optimism or pessimism felt by employers. In practical terms this could be described as employers making decisions purely from customers queuing up for their establishments or establishments being unable to fill sales orders given the volume. And likewise, any contraction in the labor force would be determined only by a lack of demand for products and services. The reality is more complicated, and as price is determined by the interplay of both demand and supply, so too is the decision to increase and decrease employment through a combination of optimism and pessimism felt by both consumers and employers.

The employer sentiment's effect on jobs is the difference between the consumer outlook for jobs and the actual change in jobs. It can be explained as the optimism or pessimism of the employers themselves. While an employer may experience higher demand for products and services, other factors tie into the determination to hire employees; finances, price of labor, impending sale or retirement, economic outlook of future periods, potential new products and services to be offered later, or new markets. For the purposes of this study, lockdowns and concerns over litigation would have the opposite effects on employment that consumer sentiment may otherwise suggest. An employer does not have perfect information and guessing the consumer's thoughts and feelings only explain a piece of the overarching puzzle.

In March of 2020, the consumer outlook on jobs is described as a loss of 412,719 jobs in Table I. If hiring was purely tied to the emotions and demands of the consumer, the job loss would have been much greater than the reality of 95,300 lost jobs. The difference was the sentiment of the employers and their outlook on the economy at that point in time. In March, health experts were

just beginning to understand the nature of COVID-19. Consumers were concerned for their wellbeing in a period of uncertainty, while the employers and owners of businesses were coming off a strong economy coupled in some cases with panic buying.[8] In April, the state and local governments instituted closures and lockdowns. The economy grinded to a halt and the pessimism for both the consumers and employers increased leading to a loss of 1,082,800 jobs, mostly driven by employers catching up for falling consumer demand from March. The situation was compounded by the shutdowns.

From the data, consumer and employer optimism and pessimism can be described as a tug of war pulling back and forth and settling on actual changes in employment moving forward. An employer may be pessimistic and want to downsize for numerous reasons; the weight of consumer demand, sales, and queues may delay the employer for the foreseeable future. Employing workers is in part tied to the present reality, and in part due to planning for the future. By September of 2020, the consumer outlook and optimism started to recover. But now the employers who had been previously optimistic in the prior months with the reopening of the Florida economy are having second thoughts. Why? One possibility is litigation as Floridians begin to assess the damage that COVID-19 has wrought on lives and the economy. From March to September, Florida has seen a total 539,100 jobs lost. 412,719 job losses can be attributed to falling consumer optimism while the rest is due to employers' and businesses' unwillingness to increase their labor force due to low demand. In the absence of a general lockdown there are 126,381 jobs that employers have not filled that would otherwise be a part of the workforce absent the COVID-19 pandemic. The study uses these job losses to estimate the impacts on Florida's economy. Since these losses are considered maximum, the estimated impacts are assumed to be the maximum impact of the employers' litigation concern.

**Table II**

| Summary (000,000's) | | | |
|---|---|---|---|
| **Impact** | **Employment** | **Personal Income** | **State GDP** |
| Direct | (126,382) | ($8,613.4) | ($9,370.4) |
| Indirect | (34,046) | ($2,878.3) | ($3,191.7) |
| Induced | (48,303) | ($3,201.9) | ($3,503.9) |
| **Total** | **(208,731)** | **($14,693.7)** | **($16,066.0)** |

Table II shows the direct loss of 126,382 jobs. Jobs lost not attributable to consumer demand and optimism, represents the maximum jobs lost as a result of employer concerns regarding litigation. The study uses an economic model, IMPLAN, to measure what a job loss of that

[8] "Timed intervention in COVID-19 and panic buying," Journal of Retailing and Consumer Services, Aug 2020

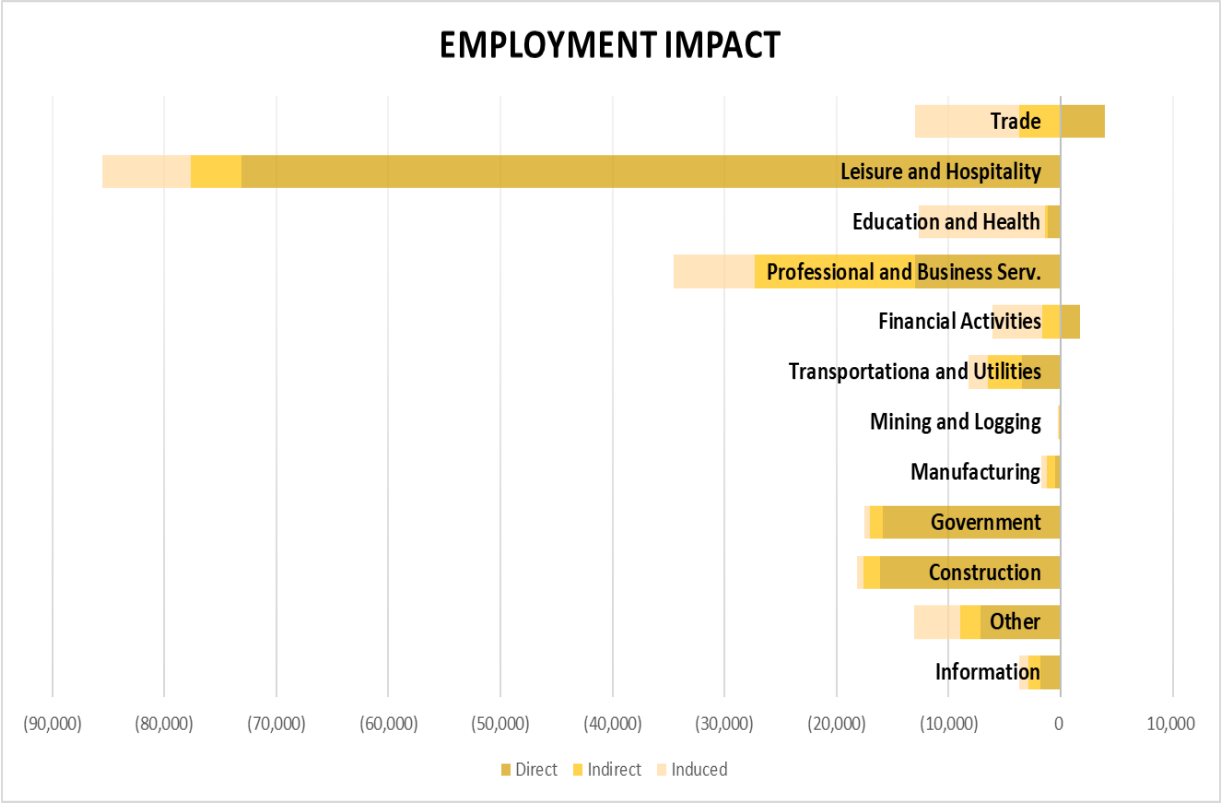
magnitude would mean to the rest of the economy. The summary of the output is presented in Table II above. The direct job loss of 126,382 jobs indirectly affect an additional employment loss of 34,046 jobs. These are jobs tied to the supply chain. If a restaurant is operating at seventy-five percent of capacity, they have less demand for food, drinks, or cooking ingredients which affects the distributor who now would have less need to employ workers making those ingredients. The induced effect is related to expenditures stemming from workers who otherwise are affected by the cutback. Because of the reduction in the workforce, those workers affected will have less money available to spend at other establishments. The ripple effect to those other businesses and establishments facing a reduced demand on their end must respond accordingly. Induced job loss is estimate at 48,303 jobs, or a total job loss across the entire spectrum of 208,731 jobs. About 39% of all jobs lost since COVID-19 began effecting the economy.

The job loss translates into a total loss of economic activity and state GDP. The direct impact of 126,382 lost jobs translates into a direct hit of -$9.4 billion on GDP. When combined with indirect and induced effects, the total GDP hit is more than -$16 billion on the economy. To put it in perspective, the most recent Florida Economic Estimating Conference measured the total nominal Florida GDP at $986.6 billion. During the fourth quarter of 2019 before COVID-19, Florida's GDP was $1.1 trillion. Since December 2019, the state's economy has contracted -$124.8 billion and employers' concern accounts for roughly 12.9% of the loss. To understand further the detail of what these impacts mean, the output has been broken down by sector across a range of topics including job loss, GDP loss, Personal Income loss, and fiscal impacts to state and local tax collections in the next sections.

**Impacts on Employment**

The first impact of employer concern is illustrated in jobs. The study began with a static or direct impact of more than one hundred and twenty-six thousand jobs lost. The losses are felt throughout economy along several different sectors. Chart I shows the impact per industry. Each bar represents the total jobs lost broken down into direct, indirect, and induced losses for each super sector.

**Chart I**




Employer concern is greatest in the Leisure and Hospitality sector which has seen a direct loss of 73,084 jobs. Adding the indirect and induced impacts give a total loss of 85,493 jobs. Roughly 41%, of the total job loss is due to employer sentiment. The Leisure and Hospitality industry has among the highest volumes of daily customer traffic and some of the more daunting tasks in ensuring everyone is following local mask mandates and measures put in place by local, state, and federal guidelines. Other industries have had little impact, and some even direct gains.

Trade has seen a direct increase in jobs resulting from employer optimism, most likely due to large grocery outlets and big box stores needing more staff to handle a more centrally focused consumer. This is particularly true to grocery stores in leu of smaller restaurants not opening, or large retail establishments in place of the smaller businesses either closed or shuttered. However, the indirect and induced effects of lost jobs from other sectors will have negative ripple effects and will spill over on trade resulting in a loss of 9,070 jobs.

**Table III**

| Employment Impact | | | | | |
|---|---|---|---|---|---|
| **Super Sectors** | **Direct** | **Indirect** | **Induced** | **Total** | **% of Total** |
| Information | (1,831) | (1,050) | (811) | (3,692) | 1.8% |
| Other | (7,177) | (1,827) | (4,104) | (13,108) | 6.3% |
| Construction | (16,085) | (1,505) | (571) | (18,161) | 8.7% |
| Government | (15,852) | (1,179) | (506) | (17,537) | 8.4% |
| Manufacturing | (512) | (683) | (507) | (1,702) | 0.8% |
| Mining and Logging | 62 | (201) | (16) | (155) | 0.1% |
| Transportationa and Utilities | (3,446) | (3,043) | (1,723) | (8,212) | 3.9% |
| Financial Activities | 1,697 | (1,671) | (4,415) | (4,389) | 2.1% |
| Professional and Business Serv. | (12,969) | (14,373) | (7,164) | (34,506) | 16.5% |
| Education and Health | (1,112) | (283) | (11,312) | (12,706) | 6.1% |
| Leisure and Hospitality | (73,084) | (4,551) | (7,858) | (85,493) | 41.0% |
| Trade | 3,927 | (3,680) | (9,317) | (9,070) | 4.3% |
| **Total** | **(126,382)** | **(34,046)** | **(48,303)** | **(208,731)** | **100.0%** |

The total job loss is estimated at 208,731 from all sectors. This includes direct, indirect, and induced causes. These jobs are tied to employer sentiment and represent the employer's concern of the economy. They carry with them current and future thinking employers have about their own beliefs and outlooks, as well as potential litigation concern in the economy. The lack of hiring can be viewed as operating below capacity, and that cost, taken on voluntarily in many cases, has major ramifications on Florida's GDP.

## Impacts on Gross Domestic Product

Gross Domestic Product is the sum of the total value of goods produced and services rendered in an economy within a given period of time, which in this case is the state of Florida. Together with Employment, GDP, and Personal Income correlate with one another. The GDP numbers follow the same patterns as the job losses, with Leisure and Hospitality leading the way.

**Chart II**

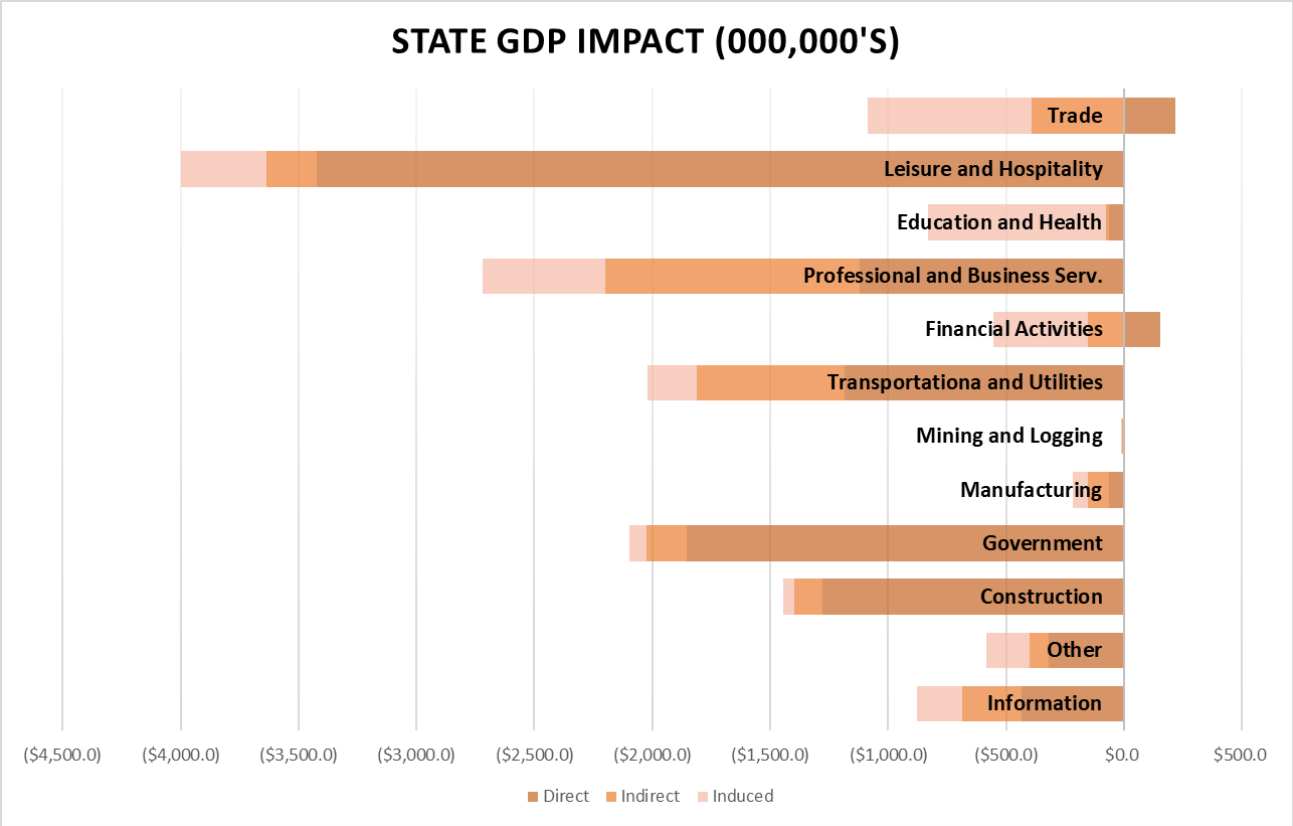



Table IV shows total GDP impact from employer sentiment accounts for more than -$16 billion loss across Florida. The two hardest hit industries are Leisure and Hospitality, and Professional and Business Services. Leisure and Hospitality account for the largest impact loss to GDP (-$3.9 billion at 24.9%). Professional and Business Services carry the second largest impact on GDP (-$2.7 billion at 16.9%). Proportional loss of GDP tied to Professional and Business Services is at a larger magnitude than the job losses tied to the same super sector. These specific jobs provide higher wages as they include positions related to professional, scientific, and technical positions, administrative and support positions, along with management positions of companies and enterprises. The change in proportional impacts from jobs to GDP shows that a smaller change in employment the per capita leads to a much higher impact. The same holds true for proportional impact increases being carried by Government, Transportation and Utilities, and construction sectors.

Ultimately, GDP is a calculation that can be arrived at by the income approach. It is the sum of income, sales taxes, depreciation, and net foreign income. As important as it is to see job losses, to understand their effects and see the ripples throughout the economy, income is important as well. It is a major component of GDP. The next chart examines the impact of lost jobs originating from employer's concern and their effects on personal income.

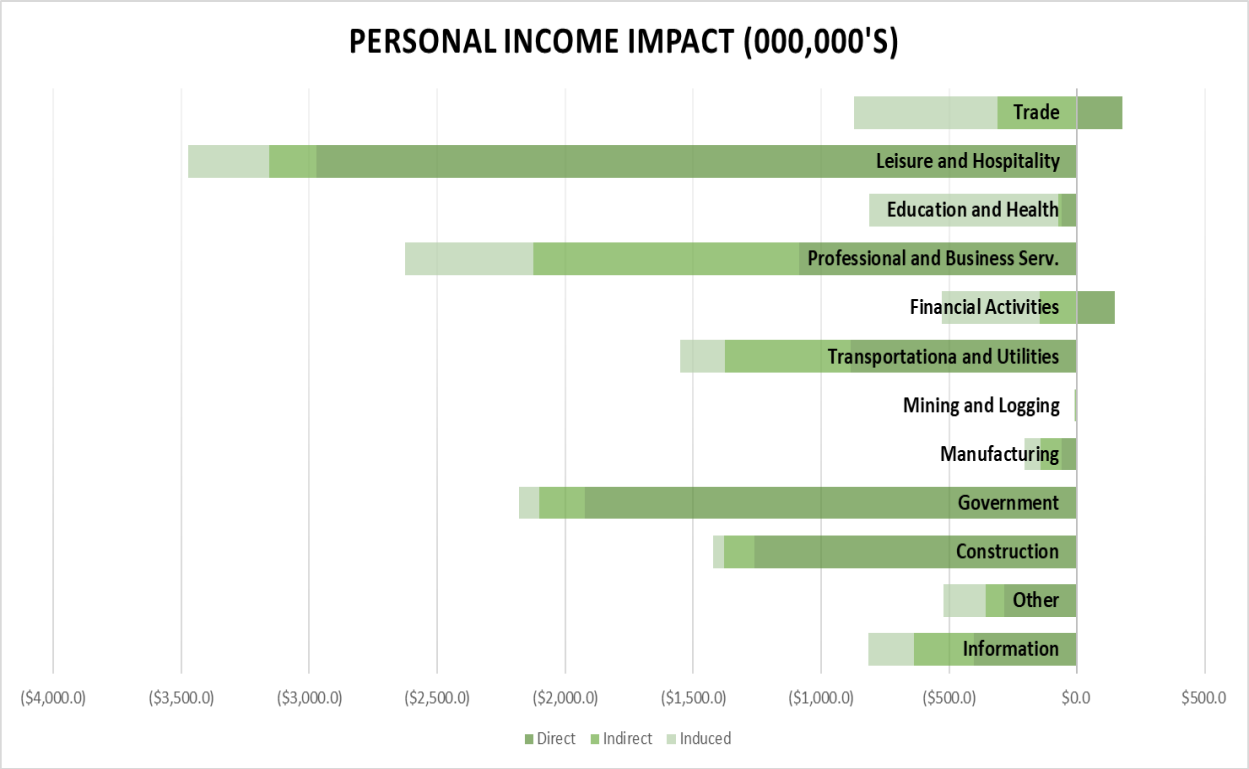
**Table IV**

| State GDP Impact (000,000's) | | | | | |
|---|---|---|---|---|---|
| **Super Sectors** | **Direct** | **Indirect** | **Induced** | **Total** | **% of Total** |
| Information | ($435.2) | ($249.6) | ($192.7) | ($877.5) | 5.5% |
| Other | ($319.7) | ($81.4) | ($182.8) | ($583.9) | 3.6% |
| Construction | ($1,279.6) | ($119.8) | ($45.4) | ($1,444.8) | 9.0% |
| Government | ($1,855.0) | ($168.5) | ($72.4) | ($2,095.8) | 13.0% |
| Manufacturing | ($64.9) | ($86.7) | ($64.3) | ($215.9) | 1.3% |
| Mining and Logging | $3.0 | ($9.6) | ($0.8) | ($7.4) | 0.0% |
| Transportationa and Utilities | ($1,184.1) | ($626.0) | ($210.1) | ($2,020.2) | 12.6% |
| Financial Activities | $154.9 | ($152.5) | ($402.9) | ($400.5) | 2.5% |
| Professional and Business Serv. | ($1,121.7) | ($1,078.5) | ($519.3) | ($2,719.5) | 16.9% |
| Education and Health | ($63.3) | ($12.9) | ($753.2) | ($829.4) | 5.2% |
| Leisure and Hospitality | ($3,421.5) | ($214.1) | ($364.1) | ($3,999.6) | 24.9% |
| Trade | $216.8 | ($392.2) | ($695.9) | ($871.4) | 5.4% |
| **Total** | **($9,370.4)** | **($3,191.7)** | **($3,503.9)** | **($16,066.0)** | **100.0%** |

**Effects on Personal Income**

According to the previous charts, Leisure and Hospitality had the largest effect on jobs and Florida GDP arising from employer concern and pessimism. Professional and Business Services had a larger proportional effect than they did when looking solely at the jobs impact. Effects on personal income in Table V illustrate better as to why that relationship exists. Despite job losses and the very real imagery of the Leisure and Hospitality industry suffering from either closing or operating at a fraction of their maximum capacity, not all jobs have the same ripple effect on the economy. Some industries, such as Professional and Business Services, along with transportation and utilities as well as government, appear to be at arm's length and behind the scenes. The reality is that they play a big role and impact when quantifying employer pessimism and concern because they have stronger purchasing power resulting from a higher personal income.

**Chart III**




As shown in Chart III and Table V, the impact on personal income also follows a similar pattern to job and state GDP losses. Leisure and Hospitality again have the largest impact on personal income (-$3.5 billion at 23.6%) followed by Professional and Business Services (-$2.6 billion at 17.9%), Government (-$2.2 billion at 14.8%), Transportation and Utilities (-$1.6 billion at 10.6%), and the Construction sector (-$1.4 billion at 9.7%). The total hit on personal income is estimated at -$14.7 billion.

To better illustrate the importance of income; the direct job impact of falling employer sentiment on Professional and Business Services is 12,969 jobs lost. Comparatively, that is 17.7% of the number of jobs lost in the Leisure and Hospitality sector. Combining the direct, indirect and induced job losses in the Professional and Business Services sector, that percentage grows to 40.4% of jobs lost in Leisure and Hospitality. Professional and Business Services is 68% of Leisure and Hospitality in total direct, indirect, and induced GDP impacts. Its total personal income effect is 75% of the Leisure and Hospitality total personal income impact across the same levels. Such relationship is due to higher personal income and ultimately larger per capita purchasing power. It is important to understand this phenomenon when addressing the dynamics of how employer concerns affect the economy across all sectors.

A more detailed breakdown of Personal Income per industry is shown in Appendix I which is composed of Employee Compensation, Proprietor's Income, and Property Income. Again, it follows the same pattern with Leisure and Hospitality ($2.4 billion at 26%) having the largest impact followed by Professional and Business Services ($2.03 billion at 21.36%) and Government ($1.5 billion at 15.6%) on Employee Compensation. However, the proportionality of impacts by industry on Proprietor's Income and Property Income differ because varying purchasing power. This phenomenon is explained earlier.

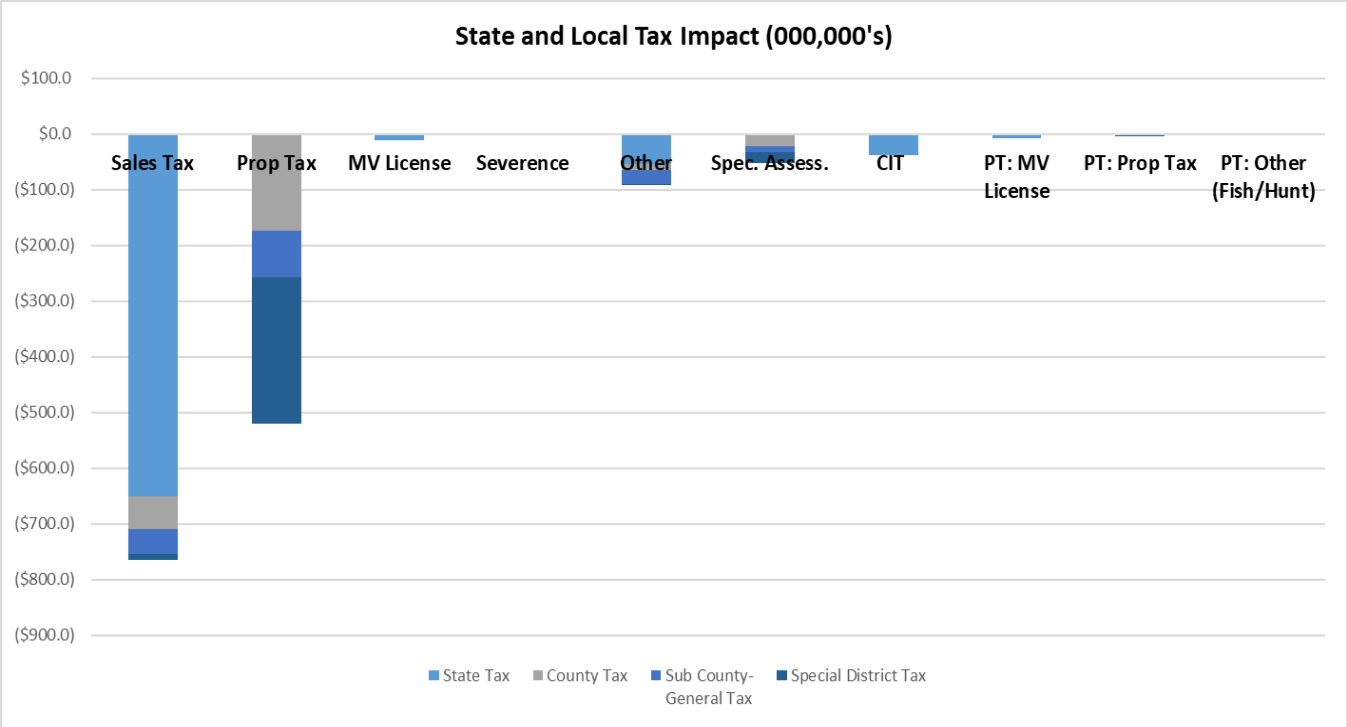
**Table V**

| Personal Income Impact (000,000's) | | | | | |
|---|---|---|---|---|---|
| **Super Sectors** | **Direct** | **Indirect** | **Induced** | **Total** | **% of Total** |
| Information | ($405.0) | ($232.3) | ($179.4) | ($816.6) | 5.6% |
| Other | ($285.5) | ($72.7) | ($163.3) | ($521.4) | 3.5% |
| Construction | ($1,259.9) | ($117.9) | ($44.7) | ($1,422.5) | 9.7% |
| Government | ($1,923.5) | ($178.7) | ($76.8) | ($2,178.9) | 14.8% |
| Manufacturing | ($62.0) | ($82.8) | ($61.4) | ($206.2) | 1.4% |
| Mining and Logging | $2.7 | ($8.7) | ($0.7) | ($6.7) | 0.0% |
| Transportationa and Utilities | ($886.1) | ($488.6) | ($175.6) | ($1,550.4) | 10.6% |
| Financial Activities | $147.9 | ($145.6) | ($384.6) | ($382.4) | 2.6% |
| Professional and Business Serv. | ($1,086.1) | ($1,039.6) | ($501.2) | ($2,627.0) | 17.9% |
| Education and Health | ($61.7) | ($12.4) | ($738.8) | ($813.0) | 5.5% |
| Leisure and Hospitality | ($2,970.1) | ($186.0) | ($315.6) | ($3,471.8) | 23.6% |
| Trade | $176.0 | ($313.0) | ($559.8) | ($696.8) | 4.7% |
| **Total** | **($8,613.4)** | **($2,878.3)** | **($3,201.9)** | **($14,693.7)** | **100.0%** |

## Fiscal Impacts on State and Local Governments

The fiscal impact on tax collections for state and local governments amounts to a near total loss of -$1.5 billion. The largest driver in lost revenue is sales tax at -$765.2 million dollars. Followed by property tax (-$520.7 million) and losses in corporate income tax (-$38.8 million). "Other taxes" includes categories such as documentary stamp tax, intangibles, business licensing and beverage taxes. Altogether the other category accounts for -$90.8 million dollar hit on revenue collections.

## Chart IV




## Table VI

**State and Local Tax Impact (000,000's)**

| Tax Category | State Tax | County Tax | Sub County-General Tax | Special District Tax | Local Total | Total | % of Total |
|---|---|---|---|---|---|---|---|
| Sales Tax | ($651.2) | ($57.9) | ($44.9) | ($11.1) | ($114.0) | ($765.2) | 51.2% |
| Prop Tax | $0.0 | ($173.6) | ($83.9) | ($263.2) | ($520.7) | ($520.7) | 34.9% |
| MV License | ($10.8) | $0.0 | ($0.0) | $0.0 | ($0.0) | ($10.8) | 0.7% |
| Severence | ($1.0) | $0.0 | $0.0 | $0.0 | $0.0 | ($1.0) | 0.1% |
| Other | ($54.8) | ($11.0) | ($24.5) | ($0.6) | ($36.1) | ($90.8) | 6.1% |
| Spec. Assess. | ($0.0) | ($21.4) | ($11.5) | ($20.2) | ($53.1) | ($53.1) | 3.6% |
| CIT | ($38.8) | $0.0 | $0.0 | $0.0 | $0.0 | ($38.8) | 2.6% |
| PT: MV License | ($8.2) | $0.0 | ($0.0) | $0.0 | ($0.0) | ($8.2) | 0.5% |
| PT: Prop Tax | $0.0 | ($1.4) | ($0.7) | ($2.1) | ($4.1) | ($4.1) | 0.3% |
| PT: Other (Fish/Hunt) | ($0.4) | $0.0 | $0.0 | $0.0 | $0.0 | ($0.4) | 0.0% |
| **Total** | **($765.2)** | **($265.3)** | **($165.4)** | **($297.3)** | **($728.0)** | **($1,493.2)** | **100.0%** |

The total tax collection loss to the state is -$765.2 million. The largest part of that loss is sales tax at -$651.2 million. Total local governments tax collections loss across all jurisdictions and tax categories is estimated at -$728.0 million with the vast majority (-$520.7 million) derived from property tax collections.

**Summary of Results**

**Table VII**

**Summary Impact (000,000's)**

| Impact | Job Impact | Personal Income Impact | State GDP Impact |
|---|---|---|---|
| Direct | (126,382) | ($8,613.4) | ($9,370.4) |
| Indirect | (34,046) | ($2,878.3) | ($3,191.7) |
| Induced | (48,303) | ($3,201.9) | ($3,503.9) |
| **Total** | **(208,731)** | **($14,693.7)** | **($16,066.0)** |
| 50% | (104,366) | ($7,346.8) | ($8,033.0) |
| 25% | (52,183) | ($3,673.41) | ($4,016.5) |
| **Total % Impact on GDP** | **-1.6%** | | |
| **% of GDP Loss since 2019Q4** | **12.9%** | | |

The final table (Table VII) summarizes the estimated impacts across different categories of job losses, GDP losses, and private income losses. It provides a grand total for each category and represents the study's analysis of the impacts due to employers' concern and their business outlook facing uncertainties and challenges in this current economy. Employer concern in the economy is estimated to account for a maximum 1.6% loss to GDP, and 12.9% of the total GDP loss since late 2019. If every single one of the 208,731 jobs were tied to litigation concerns, the maximum cost of that concern to the state GDP is $16.1 billion. However, these are estimates and accordingly they must be afforded a range. Any legislation looking to soothe concerns for employers voluntarily not operating at 100% of their capacity will bring back some number of jobs.

To better illustrate the impact and recognize the uncertainty, the study provides probability bands where the maximum impact tied to litigation concern is a hundred percent of the impact. In other words, the estimated total impacts in this study represent the highest potential impact of employer concern. The next level below in Table VII provides a 50% probability, where the study assumes that half of the employers who are not participating fully in the economy are concerned over legal liability. The bottom tier is 25% of the total impact the study has highlighted.

By providing probabilities to the analysis, this study provides a range where any legislation moving forward to help employers get back to full capacity could impact the state anywhere from a positive $4.0 billion of impact on GDP, to a maximum total of positive $16.1 billion.

## VI. Conclusion

The study concludes that the employer concern on potential lawsuits from COVID-19 has huge economic ramifications on Florida's economy. Such concern affects employers and businesses in the way they behave as it relates to hiring workers as well level of operation. Even with a 100% opening of the economy, employers are still hesitant to fully open or operate at full capacity. Their hesitancy is partially due to economic reasons, and partially due to COVID-19 liability concern without a liability shield to protect them from potential lawsuits. While their actions taken have direct effects on employment, they also have ripple effects categorized as indirect and induced on Florida's employment, GDP, personal income, and tax revenue. Using the concept of elasticity to capture employer concerns from the total economic loss resulting from COVID-19, the study was able to estimate all three impact categories: direct, indirect and induced effects. Utilizing an economic model, IMPLAN, the study finds that employer concern due to the absence of a liability shield results in a maximum total job loss of 208,731 across all industries with the largest impacts on Leisure and Hospitality followed by Professional and Business Services. Because these impacts are tied to job loss, it results in a maximum -$16.1 billion loss on GDP or -1.6% of the total GDP. Its impact on personal income amounts to a total maximum possible loss of -$14.6 billion. Total maximum effect on tax collections, both the state and local governments, is estimated at -$1.5 billion loss with the lion's share coming from sales tax. To add a factor of uncertainty, the study offers probability bands of 25% and 50% to account for the potential that other factors are partially tied in the employer's pessimism. In total, the potential impact to the state's GDP could range from a low of -$4 billion to a maximum -$16.1 billion impact and all the effects that carries with it in terms of employment, and personal income across all spectrums of the economy. The overarching impact on Florida's massive economy is not small, and the concern employers carry with them have consequences for Floridians everywhere.

## APPENDIX I

| Personal Income Impact (000,000's) | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Employee Compensation | | | | | Proprietor Income | | | | | Other Property Income | | | | |
| Super Sectors | Direct | Indirect | Induced | Grand Total | % Total | Direct | Indirect | Induced | sub-total | % Total | Direct | Indirect | Induced | sub-total | % Total | Direct | Indirect | Induced | sub-total | % Total |
| Information | ($405.0) | ($232.3) | ($179.4) | ($816.6) | 5.6% | ($142.9) | ($82.0) | ($63.3) | ($288.1) | 3.1% | ($39.0) | ($22.4) | ($17.3) | ($78.7) | 8.4% | ($223.1) | ($128.0) | ($98.8) | ($449.8) | 10.3% |
| Other | ($285.5) | ($72.7) | ($163.3) | ($521.4) | 3.5% | ($214.8) | ($54.7) | ($122.9) | ($392.4) | 4.2% | ($72.6) | ($18.5) | ($41.5) | ($132.5) | 14.1% | $1.9 | $0.5 | $1.1 | $3.5 | -0.1% |
| Construction | ($1,259.9) | ($117.9) | ($44.7) | ($1,422.5) | 9.7% | ($668.9) | ($62.6) | ($23.7) | ($755.2) | 8.0% | ($230.7) | ($21.6) | ($8.2) | ($260.5) | 27.7% | ($360.3) | ($33.7) | ($12.8) | ($406.8) | 9.4% |
| Government | ($1,923.5) | ($178.7) | ($76.8) | ($2,178.9) | 14.8% | ($1,318.2) | ($107.5) | ($46.2) | ($1,471.9) | 15.6% | $0.0 | $0.0 | $0.0 | $0.0 | 0.0% | ($605.3) | ($71.1) | ($30.6) | ($707.0) | 16.3% |
| Manufacturing | ($62.0) | ($82.8) | ($61.4) | ($206.2) | 1.4% | ($35.5) | ($47.4) | ($35.1) | ($117.9) | 1.3% | ($0.7) | ($1.0) | ($0.7) | ($2.4) | 0.3% | ($25.8) | ($34.5) | ($25.6) | ($85.9) | 2.0% |
| Mining and Logging | $2.7 | ($8.7) | ($0.7) | ($6.7) | 0.0% | $0.8 | ($2.7) | ($0.2) | ($2.1) | 0.0% | $0.4 | ($1.2) | ($0.1) | ($0.9) | 0.1% | $1.5 | ($4.9) | ($0.4) | ($3.8) | 0.1% |
| Transportationa and Utilities | ($886.1) | ($488.6) | ($175.6) | ($1,550.4) | 10.6% | ($272.5) | ($183.4) | ($84.2) | ($540.2) | 5.7% | ($37.2) | ($27.7) | ($13.9) | ($78.8) | 8.4% | ($576.3) | ($277.5) | ($77.6) | ($931.4) | 21.4% |
| Financial Activities | $147.9 | ($145.6) | ($384.6) | ($382.4) | 2.6% | $101.6 | ($100.0) | ($264.2) | ($262.6) | 2.8% | $4.2 | ($4.2) | ($11.0) | ($10.9) | 1.2% | $42.1 | ($41.4) | ($109.5) | ($108.8) | 2.5% |
| Professional and Business Serv. | ($1,086.1) | ($1,039.6) | ($501.2) | ($2,627.0) | 17.9% | ($870.9) | ($781.4) | ($375.5) | ($2,027.9) | 21.6% | ($62.1) | ($97.1) | ($47.9) | ($207.1) | 22.0% | ($153.2) | ($161.1) | ($77.8) | ($392.0) | 9.0% |
| Education and Health | ($61.7) | ($12.4) | ($738.8) | ($813.0) | 5.5% | ($51.7) | ($10.6) | ($611.2) | ($673.5) | 7.2% | ($4.5) | ($1.0) | ($49.7) | ($55.3) | 5.9% | ($5.5) | ($0.7) | ($77.9) | ($84.2) | 1.9% |
| Leisure and Hospitality | ($2,970.1) | ($186.0) | ($315.6) | ($3,471.8) | 23.6% | ($2,095.3) | ($132.7) | ($217.4) | ($2,445.4) | 26.0% | ($68.7) | ($3.3) | ($11.0) | ($83.0) | 8.8% | ($806.1) | ($50.1) | ($87.2) | ($943.4) | 21.7% |
| Trade | $176.0 | ($313.0) | ($559.8) | ($696.8) | 4.7% | $125.6 | ($188.7) | ($366.1) | ($429.3) | 4.6% | $8.1 | ($13.5) | ($24.8) | ($30.2) | 3.2% | $42.4 | ($110.8) | ($168.8) | ($237.3) | 5.5% |
| Total | ($8,613.4) | ($2,878.3) | ($3,201.9) | ($14,693.7) | 100.0% | ($5,442.8) | ($1,753.7) | ($2,210.0) | ($9,406.5) | 100.0% | ($502.9) | ($211.3) | ($226.1) | ($940.3) | 100.0% | ($2,667.7) | ($913.4) | ($765.8) | ($4,346.9) | 100.0% |

# IMPLAN MODEL AND DEFINITIONS

## IMPLAN MODEL

IMPLAN is the leading provider of economic impact data and analytical software. The company began in 1972 working with the US Forest Service and has grown to a current user base of academics, governments, economic developers, corporations, nonprofits, and consultants.

Input-Output (I-O) modeling is based on the foundational concept that all industries, households, and government in the economy are connected through buy-sell relationships, therefore a given economic activity supports a ripple of additional economic activity throughout the economy. IMPLAN is an I-O modeling system that uses annual, regional data to map these buy-sell relationships so users can predict how specific economic changes will impact a given regional economy or estimate the effect of past or existing economic activity. Input-output accounting (using the IMPLAN model as an example) describes commodity flows from producers to intermediate and final consumers. The total industry purchases of commodities, services, employment compensation, value added, and imports are equal to the value of the commodities produced. Industries producing goods and services for final use and purchases for final use (final demand) drive the model. Industries producing goods and services for final demand purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services continues until leakages from the region stop the cycle. The resulting sets of multipliers describe the change of output for every regional industry caused by a US$1.00 change in final demand for any given industry.

Input-Output (I-O) Analysis and IMPLAN is designed to predict the ripple effect of an economic activity by using data about previous spending. Production in a given Sector in an economy supports demand for production in Sectors throughout the economy, both due to supply chain spending and spending by workers. One of the tenets that makes IMPLAN so attractive is that there are no black boxes. Analysts can view the background data used in the models and customize them with local data and knowledge.

## DIRECT EFFECTS

Direct effects are the set of expenditures applied to the I-O for an impact analysis. It is the initial exogenous change in final demand in terms of Industry Output, Employment, and Labor Income Dollars. It is one or more production changes or expenditures made by producers/consumers as a result of an activity or policy. Direct effects can be positive or negative. These initial changes are determined by an analyst and demonstrate the result of an activity or policy being analyzed. Applying these initial changes to the multipliers in IMPLAN will then display how a region will respond economically to these changes. When consumers purchase goods and services, they create final demand to the Industries producing the goods and services they consume.

## INDIRECT EFFECTS

Indirect effects are the business to business purchases in the supply chain taking place in the region that stem from the initial industry input purchases. As the industry specified spends their money in the region with their suppliers, this spending is shown through the indirect effect.

## INDUCED EFFECTS

Induced effects are the values stemming from household spending of Labor Income, after removal of taxes, savings, and commuter income. The induced effects are generated by the spending of the employees within the business' supply chain.

## EMPLOYMENT

Employment data in IMPLAN follows the same definition as Bureau of Economic Analysis Regional Economic Accounts (BEA REA) and Bureau of Labor Statistics Census of Employment and Wages (BLS CEW) data, which is full-time/part-time annual average. Thus, 1 job lasting 12 months = 2 jobs lasting 6 months each = 3 jobs lasting 4 months each. A job can be either full-time or part-time. Similarly, a job that lasts one quarter of the year would be 0.25 jobs. Note that a person can hold more than one job, so the job count is not necessarily the same as the count of employed persons. Jobs in IMPLAN are not the same as a full-time equivalent number.

## LABOR INCOME

Labor Income represents the total value of all forms of employment income paid throughout a defined economy during a specified period of time. It reflects the combined cost of total payroll paid to employees (e.g. wages and salaries, benefits, payroll taxes) and payments received by self-employed individuals and/or unincorporated business owners (e.g. capital consumption allowance) across the defined economy. Labor Income (LI) encompasses two additional representative metrics called Proprietor Income (PI) and Employee Compensation (EC).

## VALUE ADDED

Value Added represents the difference between *Output* and the cost of *Intermediate Inputs* throughout a defined economy during a specified period of time. It equals gross Output minus Intermediate Inputs (consumption of goods and services purchased from other industries or imported). Value Added is a measure of the contribution to GDP made by an individual producer, Industry, or Sector.

## OUTPUT

All analysis in IMPLAN is based on Output, which is the value of production by industry in a calendar year. IMPLAN Output data largely come from the same sources as those used by the BEA in developing their Benchmark Input-Output tables. Since output is the total production value of a Sector, it includes all components of production value or output for a given Sector:

Output = Employee Compensation + Proprietor Income + Intermediate Expenditures + Tax on Production and Imports + Other Property Income.

## OTHER PROPERTY INCOME

Other Property Income (OPI), previously denoted as "Profit" includes consumption of fixed capital (CFC), corporate profits, and business current transfer payments (net). Subsidies for government enterprises is considered negative profit, therefore any subsidization of a government enterprise will count as a negative value towards the government enterprise Sector's OPI.

## TAXES ON PRODUCTION & IMPORTS

Taxes on Production & Imports, less subsidies (TOPI) includes sales and excise taxes, customs duties, property taxes, motor vehicle licenses, severance taxes, other taxes, and special assessments. For all Sectors other than government enterprises, subsidies are counted as a negative value towards TOPI.