

# Estimated Economic Impacts of the Hospitality and Leisure Job Losses During the COVID-19 Pandemic: The Athens Metropolitan Statistical Area



Hospitality and Food Industry Management  
(HFIM) Program

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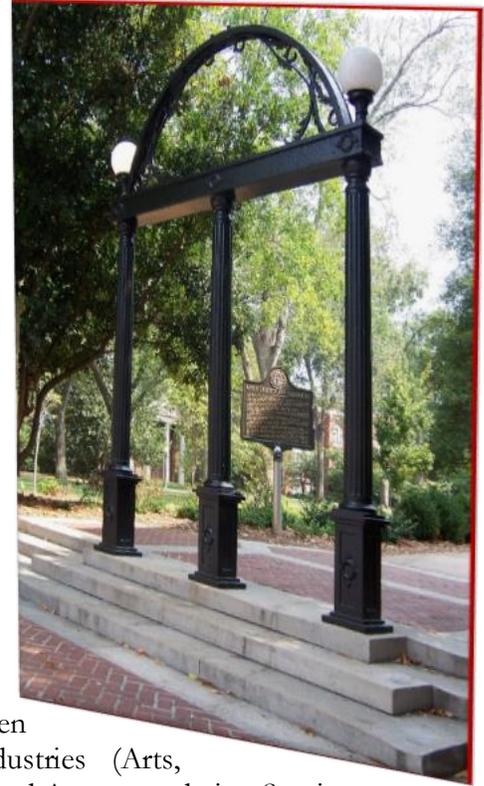
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**HOSPITALITY AND FOOD INDUSTRY MANAGEMENT BRIEF 2020-04**

## Summary

The hospitality and food industry has been one of the hardest hit sectors of the U.S. economy by the COVID-19 pandemic. In the Athens, GA Metropolitan Statistical Area (MSA), an estimated 4,200 jobs were lost attributable to the pandemic in March and April of 2020. In the Athens MSA in March and April 2020, this job loss was associated with an estimated 2-month decrease in labor income of about \$20 million, and an estimated 2-month decrease in output (value of goods & services) of about \$66 million.

The intended audiences of this brief are business owners and operators in the hospitality and food industry, state and local government agencies and offices who manage hospitality and tourism related programs and policies, and NGOs and the general public interested in the hospitality and food industry in the State of Georgia. The overall purpose of the brief is to provide information for facilitating private and public decision-making and responses related to the COVID-19 pandemic.



## Background

The COVID-19 pandemic has caused widespread and catastrophic disruptions in the state and local economies of the United States. Multiple industries have been significantly affected – Hospitality and Leisure Industries (Arts, Entertainment and Recreational Service Sector and Food and Accommodation Service Sector) have been particularly hard hit. The hospitality and tourism industry is “big business” in the State of Georgia. Athens is one of the primary hubs of recreation and leisure-related businesses and the Georgia Tourism Industry in general. As shown in this brief, the negative impacts of the COVID-19 on economic activity in the hospitality and leisure industry have caused severe economic hardships in the Athens MSA in terms of reduced employment, income, and tax revenues.

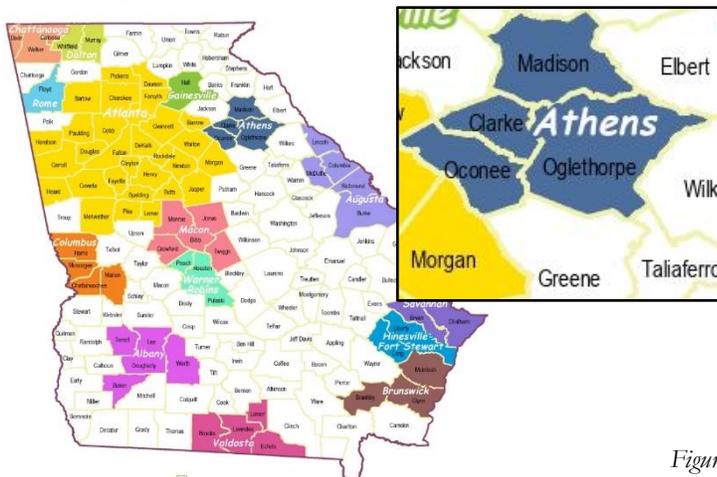


Figure: Map of Athens MSA (Source: US Bureau of the Census, 2013)

## Methodology

The economic impacts of job losses in the hospitality and leisure industry attributable to the COVID-19 virus were estimated using the *IMPLAN model*. *IMPLAN (Impact Analysis for PLANning)* is a computer-based, input-output economic modeling system designed specifically to conduct economic impact analysis, which has been in use since 1979. *IMPLAN* is a widely applied and accepted tool for measuring the total economic impacts of tourism and other industries.



The *IMPLAN* model estimates the direct, indirect and induced effects of hospitality and tourism-related expenditures such as expenditures on overnight hotel stays. The direct effects represent the initial spending by hotel guests in the local or state economy. The initial spending by hotel guests stimulates secondary spending in the economy. For example, when guests stay at a hotel, the hotel increases purchases of inputs needed to provide guest services – for example, food and beverages needed for the provision of room meal service. Food and beverage suppliers, in turn, need to purchase more inputs to provide more of their products to hotels. The ‘ripple

effect’ expenditures made by all business sectors in order to meet hotel guest's demands for goods and services are the indirect effects of hotel guest spending.

The additional economic activity stimulated by the direct and indirect effects hotel guest spending results in increased income in the local economy (for example, increased profit to the business, increased wages and compensation to employees). As household incomes grow, households spend more money on goods and services, stimulating additional economic activity. This additional economic activity and its impacts represent the induced effects of hotel guest spending.

Ideally, the economic impacts of the COVID-19 pandemic on the hospitality industry would be measured by entering reductions in final demand for hotel guest services into *IMPLAN*. However, data on final demand changes (e.g., changes in final demand for hotel stays) were not available. Entering changes in jobs lost in the hospitality industry into *IMPLAN* is an alternative approach for estimating the direct, indirect, and induced effects of the COVID-19 virus on the Athens MSA’s economy. The main advantage of this approach is that jobs and employment data are readily available from the Georgia Department of Labor for multiple MSAs.

According to the Georgia Department of Labor, approximately 4200 jobs in the Athens MSA were lost in March and April of 2020 (i.e. -38.5% change) broadly in the Hospitality and Leisure Sector, which includes multiple arts, entertainment, recreation, food



and accommodation sub-sectors.<sup>1</sup> It is fairly safe to assume that almost all of these job losses were due to the COVID-19 travel restrictions and consumer concerns about being infected with the virus. For input into IMPLAN, the 4,200 Athens MSA job-loss in the Leisure and Hospitality sector was disaggregated into sub-sectors as shown in *Table 1*. In *Table 1*, referred to as a Bridge Table, the “share” (percentage) of the total ‘Arts, Entertainment and Recreation’ and ‘Accommodations and Food’ services sector which is composed of a particular sub-sector (e.g., Industry Code 496 for Performing arts companies; 507 for Hotels and motels) comes from the Industry Detail data provided in the IMPLAN software/data sets.

*Table 1. Bridge Table for Disaggregating March and April 2020 Athens MSA Employment Losses in the Hospitality and Leisure Sector into Industry Sub-Sectors for input into IMPLAN*

Sector	Industry Code	Industry Sub-Sector Categories for Hospitality and Leisure Sector	Share	Job Loss in each sub-sector
Arts, Entertainment and Recreational Services	496	Performing arts companies	2.52%	-106
	497	Commercial Sports Except Racing	0.78%	-33
	498	Racing and Track Operation	0.02%	-1
	499	Independent artists, writers, and performers	6.83%	-287
	500	Promoters of performing arts and sports and agents for public figures	1.13%	-47
	501	Museums, historical sites, zoos, and parks	0.02%	-1
	502	Amusement parks and arcades	0.14%	-6
	504	Other amusement and recreation industries	2.31%	-97
	505	Fitness and recreational sports centers	2.60%	-109
	506	Bowling centers	0.12%	-5
Food and Accommodation Services	507	Hotels and motels, including casino hotels	3.87%	-163
	508	Other accommodations	2.53%	-106
	509	Full-service restaurants	30.58%	-1,284
	510	Limited-service restaurants	30.91%	-1,298
	511	All other food and drinking places	15.64%	-657
<b>Total</b>			<b>100%</b>	<b>-4,200</b>

The next step in estimating the economic impacts of employment losses was to enter the sub-sector employment losses shown in the fifth column of *Table 1* as “event” changes in the corresponding sub-sectors in IMPLAN. The IMPLAN model then estimated the changes in labor income, value-added, and output in each sub-sector associated with the reduction in employment in each sub-sector. Because IMPLAN automatically generates impacts from an “event” change on an annual basis, it was then necessary to divide the IMPLAN impact results by 12 to convert the annual impact estimates to a monthly basis. The 2-months (March and April 2020) impacts were then calculated by multiplying the monthly impact estimates by 2.



<sup>1</sup> Georgia Department of Labor, Workforce Statistics & Economics Research, Georgia Nonfarm Employment (Seasonally Adjusted), March and April 2020.

## Results

The estimated economic impacts on the Athens MSA economy in March and April 2020 associated with employment reductions in the Hospitality and Leisure sector in these months are shown in *Table 2*. The total decrease in labor income in March and April 2020 was estimated at about \$20 million. The total decrease in value-added in March and April 2020 was estimated at about \$32 million. The total decrease in output in March and April 2020 was estimated at about \$66 million.

*Table 2. Economic Impacts on the Athens MSA Economy of Employment Reductions in the Hospitality and Leisure Sector in March and April 2020*

Impact Type	Economic Impact Indicator		
	Labor Income	Value Added	Output
Direct	\$ (13,004,919)	\$ (19,839,350)	\$ (41,586,546)
Indirect	\$ (4,253,341)	\$ (6,915,630)	\$ (15,635,428)
Induced	\$ (2,611,200)	\$ (5,031,466)	\$ (8,845,103)
<b>Total</b>	<b>\$ (19,869,460)</b>	<b>\$ (31,786,446)</b>	<b>\$ (66,067,077)</b>

The estimated changes in the output by sub-sector in the Athens MSA in March and April 2020 associated with employment reductions in the Hospitality and Leisure sector in these months are shown in *Table 3*. The following table can be interpreted as follows: the total decrease in output in March and April 2020 in the “performing arts” sub-sector was estimated at about \$1.7 million. Similarly, the total decrease in output in March and April 2020 in the “hotels and motels” sub-sector was estimated at about \$2.5 million.



*Table 3. Changes in Output in the Athens MSA Economy by Sub Sector Associated with Employment Reductions in the Hospitality and Leisure Sector, March and April 2020*

	Impact Type →	Direct (\$)	Indirect (\$)	Induced (\$)	Total (\$)
Industry Sub-Sector	Performing arts companies	(1,048,479)	(394,200)	(223,003)	(1,665,682)
	Commercial Sports Except Racing	(322,827)	(121,374)	(68,662)	(512,863)
	Racing and Track Operation	(7,716)	(2,901)	(1,641)	(12,259)
	Independent artists, writers, and performers	(2,839,266)	(1,067,488)	(603,888)	(4,510,642)
	Promoters of performing arts and sports and agents for public figures	(468,459)	(176,128)	(99,637)	(744,225)
	Museums, historical sites, zoos, and parks	(9,292)	(3,494)	(1,976)	(14,762)

Amusement parks and arcades	(58,864)	(22,131)	(12,520)	(93,515)
Other amusement and recreation industries	(962,540)	(361,889)	(204,724)	(1,529,153)
Fitness and recreational sports centers	(1,081,370)	(406,566)	(229,998)	(1,717,935)
Bowling centers	(51,852)	(19,495)	(11,028)	(82,375)
Hotels and motels, including casino hotels	(1,609,120)	(604,986)	(342,246)	(2,556,352)
Other accommodations	(1,052,539)	(395,726)	(223,866)	(1,672,131)
Full-service restaurants	(12,716,990)	(4,781,248)	(2,704,795)	(20,203,033)
Limited-service restaurants	(12,853,097)	(4,832,420)	(2,733,744)	(20,419,261)
All other food and drinking places	(6,504,134)	(2,445,380)	(1,383,374)	(10,332,888)

“Limited-service restaurants” followed by “Full-service restaurants” and “all other food and drinking places” have had the highest negative total economic impacts among the food and accommodation sector. Likewise, “independent artists, writer and performers” followed by “fitness and recreational sports center” and “performing arts companies” have faced the highest negative total economic impacts among arts, entertainment, and recreation sectors. Thus, the food and accommodation sector is the hardest hit in the hospitality and leisure industry.

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The content of this brief is the sole responsibility of the authors.