

## Paycheck Protection Program Participation by Tennessee's Food and Beverage Industry, April 3-June 30, 2020

*Sreedhar Upendram, Assistant Professor  
Kimberly L. Jensen, Professor  
Alicia Rihn, Assistant Professor  
Jackie Yenerall, Assistant Professor  
Ethan Loveday, Undergraduate student, research project  
Department of Agricultural and Resource Economics*

November 7, 2020



Photo by Louis Hansel @shotsoflouis onUnsplash

## COVID-19 Pandemic and the Food and Beverage Industry

The World Health Organization declared the Novel Coronavirus Disease (COVID-19) a pandemic on March 11, 2020, (CDC, 2020) and shortly after on March 13, 2020, President Trump declared that the COVID-19 outbreak in the United States was a national emergency (White House, 2020a). The Trump administration issued federal guidelines on March 16 recommending that Americans work from home when possible, avoid groups of more than 10 people and avoid eating in restaurants and bars (White House, 2020b). Many states adopted and adapted these federal guidelines into executive orders (EO), which either suggested or required that citizens in those states follow the guidelines. In response to the deleterious effects of the pandemic upon small businesses, Coronavirus Aid, Relief and Economic Security (CARES) Act was passed by Congress (U.S. Department of Treasury, 2020a). One of these small business assistance programs under the CARES Act is the Paycheck Protection Program (PPP). This program is designed to assist small business owners with maintaining payrolls and other business operating expenses during the pandemic (BEA, 2020). The purpose of this study is to provide information about participation by Tennessee's food and beverage industry participants in the PPP.

## State Level and Local Orders Impacting the Food and Beverage Industry

In Tennessee, both the state and local governments passed orders (i.e., executive orders, public health orders or health directives) to restrict mass gatherings and business operations. Those relevant to the beverage industry include stay-at-home (SAH) orders and the closure of bars and restaurants to in-person operations. Table 1 captures the timeline of these orders in the state.

**Table 1. Tennessee State and Local Orders Restricting Business Activity and Implementing Stay-At-Home Orders**

Date Signed	Date Effective	Applies To:	Details and Source
3/19/2020	3/19/2020 at 12:00 a.m.	Chattanooga	Closes in-person service in restaurants; allows take-out and delivery. <a href="#">Executive Order 2</a>
3/20/2020	3/20/2020 at 8:00 p.m.	Davidson County	Closes in-person service in restaurants; allows take-out and delivery. <a href="#">Public Health Order 1 Amended</a>
3/20/2020	3/20/2020 at 8:00 p.m.	Knoxville	Closes in-person service in restaurants; allows take-out and delivery. <a href="#">Emergency Executive Order 1</a>
3/20/2020	3/22/2020 at 6:00 a.m.	Shelby County	Closes in-person service in restaurants; allows take-out and delivery. <a href="#">Executive Order</a>
3/22/2020	3/23/2020 at 12:01 a.m.	All of TN	Closes in-person service in restaurants; allows take-out and delivery. <a href="#">Executive Order 17</a>
3/22/2020	3/23/2020 at 12:01 a.m.	Davidson County	SAH Order: Citizens are urged to shelter at home, and all business not performing essential services must close. <a href="#">Public Health Order 3</a>
3/23/2020	3/24/2020 at 12:01 a.m.	Knox County	SAH Order: Citizens are urged to shelter at home, and all business not performing essential services must close. <a href="#">Public Health Order</a>

Date Signed	Date Effective	Applies To:	Details and Source
3/24/2020	3/24/2020 at 6:00p.m.	Shelby County	SAH Order: Citizens are urged to shelter at home, and all business not performing essential services must close. <a href="#">Executive Order</a>
3/23/2020	3/25/2020	Chattanooga	Closes in-person service in restaurants; allows take-out and delivery. <a href="#">Executive Order 4</a>
3/24/2020	3/25/2020 at 12:01 a.m.	Franklin	SAH Order: Requires individuals to stay at their place of residence, and all business not performing essential services must close. <a href="#">Executive Order 2</a>
3/25/2020	3/25/2020	Shelby County	SAH Order: Directs individuals to shelter in place, and closes all business not performing essential services. <a href="#">Health Directive</a>
3/30/2020	3/31/2020 at 11:59 p.m.	All of TN	SAH Order: Urges Tennesseans to stay home and closes all business not performing essential services. <a href="#">Executive Order 22</a>
3/30/2020	4/1/2020	Knoxville	SAH Order: Urges residents to shelter at home and closes all business not performing essential services. <a href="#">Emergency Executive Order 4</a>
4/2/2020	4/2/2020	All of TN	SAH: Requires Tennesseans to stay home. <a href="#">Executive Order 23</a>
4/2/2020	4/4/2020 at 12:01 a.m.	Chattanooga	SAH: Residents are ordered to shelter at their place of residence and closes all business not performing essential services. <a href="#">Executive Order 6</a>

Across the state, the closure of bars and restaurants began in late March, first at the city and county level and then at the state level on March 22. Bar and restaurant closures at the state level began on March 23 when Governor Lee issued Executive Order 17 (EO 17). This executive order prohibited the on-site consumption of food and beverages at bars, restaurants and other similar establishments but allowed for these businesses to continue pick-up, drive through and delivery services. It also temporarily suspended laws, rules and ordinances to allow restaurants, limited service restaurants and wine-only restaurants to sell alcoholic beverages or beer through takeout and delivery services, so long as the sale also included food, and the alcohol was packaged according to guidelines established in the executive order.

The restrictions on restaurant and bar operations were closely followed by the implementation of SAH orders, which either urged or required individuals to limit activity outside of the home. Generally, individuals were allowed to leave their homes to obtain essential services, which included purchasing food, either at grocery stores or takeout from restaurants, and beverages. Implementation of the SAH orders also required businesses to cease in-person operations, unless they qualified as an essential business. At the state level, Governor Lee's Executive Order No. 22 (EO 22) implemented a statewide safer-at-home directive (State of Tennessee, 2020). Under EO 22, several types of firms were deemed essential services which meant that they could remain open (State of Tennessee, 2020). In the food and beverage industry, food and medicine stores (e.g., grocery

stores, farmers markets, produce stands, supermarkets, etc.), food and beverage production and agricultural firms, restaurants for off-premises consumption and manufacturing/distribution/supply chain firms were included in the essential services category.

Although bars and restaurants were allowed to continue take-out and delivery services and temporarily sell alcohol with take-out and delivery sales, nationally, sales at the retail level for away-from-home markets were substantially impacted, resulting in business closures in some cases (Gross, 2020). Nationally, it can be noted that food retailing supplied \$1.77 trillion of food in 2019, with away-from-home eating options accounting for 54.8 percent of national food sales (USDA-ERS, 2020). The impacts from COVID-19 were particularly pronounced on the away-from-home segment of food retailing, which now comprises the largest proportion of food expenditures.

In addition to business closures or limitations on operations due to state and local directives, the COVID-19 pandemic and associated economic downturn resulted in several other forces affecting the food and beverages industry. In the early weeks of the pandemic, some food and beverage facilities experienced outbreaks and related temporary closures (Soucheray, 2020). Also, the associated economic downturn resulted in changes to household employment and incomes that likely place downward pressure on the demands for food and beverages away from home (Jensen, et al., 2020). Notably, Tennessee's unemployment increased from 3.3 percent in January 2020 to 15.5 percent in April 2020 and 11.0 percent in May 2020 (Bureau of Labor Statistics, 2020). Even with restaurant and bars reopening their in-person dining facilities on April 27 as part of Governor Lee's EO 29, several metropolitan counties, including Davidson, Shelby and Knox, were allowed to continue more restrictive measures, and many consumers may have concerns about dining or drinking inside restaurants or bars (Jensen, et al., 2020). Given all of these forces which have placed significant financial pressure and uncertainty on Tennessee's food and beverage industry, particularly among the food services segment of the industry, many of these firms participated in the PPP program to obtain loans to cover their payroll and to retain as many jobs as possible through the early weeks of the pandemic.

### **CARES Act and the PPP**

In order to offset some of the pandemic's impacts upon small businesses, the CARES Act was passed by Congress and signed into law by President Trump on March 27, 2020 (U.S. Department of Treasury, 2020a). The package included over \$2 trillion in economic relief to help offset the negative economic impacts of COVID-19. One of these small business assistance programs is the PPP, which is administered by the Small Business Administration through local lending institutions. The PPP is designed to assist small business owners with maintaining payrolls and other business operating expenses during the pandemic and associated economic downturn by providing over \$660 billion in forgivable loans (BEA, 2020). The PPP was approved initially on April 3, 2020, and was extended through the PPP and Health Care Enhancement Act on April 24, 2020, which also added to the loan amount originally created under the CARES Act. While the original PPP loan application deadline was June 30, 2020, the PPP resumed accepting applications on July 6, 2020, in response to the President signing the program's extension legislation. As of this report date, the application deadline was extended to August 8, 2020. This study includes data from the first phase of the PPP.

The PPP launched April 3, 2020. The PPP is a loan designed to provide a direct incentive for small businesses to keep their workers on the payroll. The program offered forgivable loans of up to \$10 million to help small businesses maintain payroll, hire back employees and cover rent and other overhead. Under the PPP, small businesses could receive funds to pay up to eight weeks of payroll costs including benefits. The loans are forgivable if 60 percent is used on payroll over a 24 weeks span. Forgiveness is based on the employer maintaining or quickly rehiring employees and maintaining salary levels. Loan forgiveness is reduced if full-time headcount declines or if salaries and wages decrease.

## Study Purpose

The purpose of this publication is to provide information about participation in the PPP by Tennessee's food and beverages industry that includes food manufacturing (NAICS 311-); beverage manufacturers (NAICS 312-); grocery wholesalers (NAICS 4244-); beer, wine and distilled beverages wholesalers (NAICS 4248-); grocery and specialty food stores (NAICS 4451-, 4452-); beer, wine and liquor stores (NAICS 4453-); specialty food services and restaurants (NAICS 7225-); and drinking places (NAICS 7224-).<sup>1</sup> Measures include the number of firms participating, loan amounts and jobs retained using PPP loan funds. The data contained in this study are for PPP loans approved from the initiation of the program on April 3, 2020, until June 30, 2020, and do not include the later application period mentioned in the paragraph above.

## Food and Beverage Industry in Tennessee

Table 2 displays the number of food and beverage establishments, payroll, employees and average wages for Tennessee's food and beverage industry. This data is sourced from the 2018 County Business Patterns (CBP) (U.S. Census Bureau, 2018).

**Table 2. Tennessee's Food and Beverage Industry Overview for 2018**

Type of Firms	Number of Establishments	Annual Payroll	Number of Employees	Average Wages
Food Processors	366	\$1,601,670,000	35,246	\$45,000
Beverage Manufacturing	165	\$220,513,000	4,542	\$48,500
Grocery Wholesalers	436	\$1,026,051,000	15,638	\$65,000
Alcoholic Beverages Wholesalers	61	\$219,326,000	3,762	\$58,300
Grocery and Specialty Food Stores	1,678	\$869,668,000	49,208	\$17,000
Liquor, Beer and Wine Stores	643	\$70,266,000	2,946	\$23,800
Specialty Food Services and Restaurants	11,719	\$4,364,569,000	258,855	\$16,800
Drinking Places	348	\$114,862,000	4,888	\$23,500
Total	15,416	\$8,486,925,000	375,085	\$22,600

Source: 2018 Tennessee CBP (U.S. Census Bureau 2018)

## Data Description

The data for this report was sourced from the U.S. Department of Treasury on July 19, 2020 (U.S. Department of Treasury, 2020b). Thus, the PPP loan information presented in this report is from the date of inception (April 3, 2020) through June 30, 2020. The 2017 NAICS codes were used to extract data for food and beverage manufacturers, food and beverage retail stores and restaurants and bars for Tennessee. Several statistics are reported by firm type (NAICS) including:

- The number of PPP loans approved.
- The dollar value of PPP loans approved.
- The dollar value of PPP loans approved per firm.
- The jobs retained with PPP loans.
- The jobs retained with PPP loans per firm.
- The PPP loan dollars per job retained.

## Tennessee Food and Beverage Industry Participation in PPP Loans and Loan Dollars Approved

As shown in Table 3, in total, 7,834 food and beverage firms in Tennessee were approved for PPP loans. The largest number of Tennessee food and beverage firms participating in the PPP are restaurants and eating places. This was followed by food stores at 1,129 firms. The majority of loans,

<sup>1</sup> NAICS is the abbreviation for the 2017 North American Industry Classification System codes.



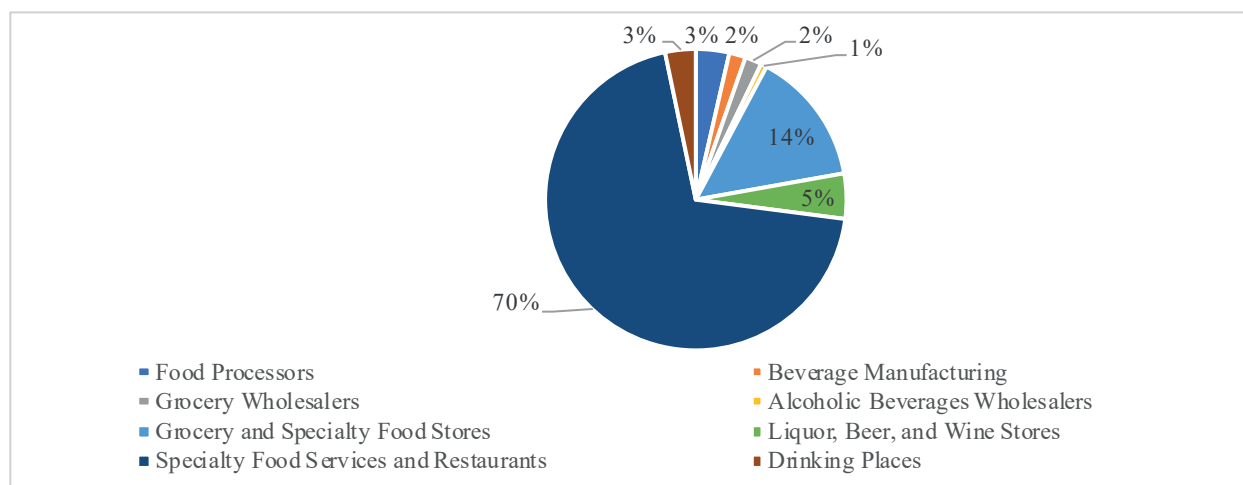
about 82.6 percent, were under \$150,000. Figure 1 shows the percentages of firms with loans by type of food and beverage firm type. As can be seen in Figure 1, about 70 percent were restaurants and specialty food services, followed by food stores (grocery and specialty) at 14 percent. Each of the other type of firms constituted less than 10 percent of the firms with loans approved. In the fifth column of Table 3, the number of firms participating is compared to the 2018 CBP number of establishments. In some industry sectors, more than three-fourths of the businesses participated. The largest number was restaurants and specialty food services at 5,548 firms, constituting about 47.3 percent of CBP firm numbers. Overall, more than half of food industry firms participated in the PPP, illustrating the marked effect that the pandemic has had on the food and beverage industry in Tennessee.

**Table 3. Number of PPP Applicants Among Tennessee Food and Beverage Firms With Approved Loans, by Firm Type, April 3-June 30, 2020\***

Firm Type	Number of Firms with PPP Approved Loans, by Firm Type			Percent of 2018 CBP Number of Establishments*
	Under \$150,000	\$150,000 and Over	Total	
Food Processors	232	49	281	76.8%
Beverage Manufacturers	112	26	138	83.6%
Grocery Wholesalers	101	40	141	32.3%
Alcoholic Beverages Wholesalers	31	19	50	82.0%
Grocery and Specialty Food Stores	1,066	63	1,129	67.3%
Liquor, Beer and Wine Stores	373	7	380	59.1%
Specialty Food Services and Restaurants**	4,565	893	5,548	47.3%
Drinking Places	215	42	257	73.9%
Total	6,695	1,139	7,834	50.8%

\*CBP-number of establishments (U.S. Census Bureau, 2018)

\*\* Specialty Food Services and Restaurants and Eating Places combined percent.



**Figure 1. Percent of PPP Loan Applicants by Tennessee Food and Beverage Firms, by Firm Type, April 3-June 30, 2020**

Table 4 shows the PPP loan dollars approved by type of food and beverage firm. In total, \$960.9 million in loans were approved for the food and beverage industry in Tennessee from April 3 to June 30. Restaurants and eating places had the most PPP loan dollars approved at \$741.9 million. The fourth column compares the total PPP loan amounts with 2018 payroll. The 2018 payroll was adjusted to 2020 values with the Southeast Consumer Price Index ratio for March 2020 and March 2018 (U.S. Census Bureau, 2020). As can be seen in that column, PPP loan dollars approved for drinking places amounted to 26 percent of 2018 CBP annual payroll (adjusted to 2020 dollars). The percentages for beverage wholesalers, specialty food services and restaurants, and beverage stores were each respectively over 16 percent. PPP loan dollars for food processors and grocery wholesalers were less than 3 percent of 2018 CBP payroll amounts. Shown in Figure 2, about 77 percent of the loan dollars approved for Tennessee's food and beverage industry firms went to specialty food services and restaurants.

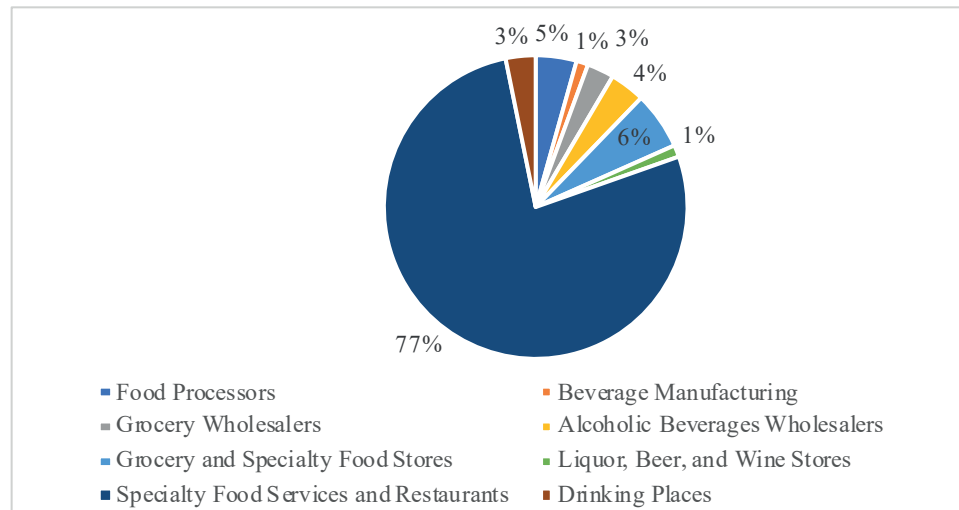
The distribution of the food and beverage firms with approved PPP loans, April 3-June 30, 2020, across counties in Tennessee is shown in Figure 3. Not surprisingly, many of the firms receiving loan approval align with areas of denser populations (i.e., near urban areas). In particular, this is highlighted around the metro areas of Memphis, Nashville, Chattanooga and Knoxville. The greatest concentration of PPP loans for food and beverage firms occurred in Davidson county, followed by Shelby, Knox and Hamilton counties. The distribution of loan dollars among Tennessee food and beverage firms, by county, April 3- June 30, 2020, is shown in Figure 4. The greatest amount of PPP loan dollars among food and beverage firms are in Davidson, Shelby and Knox counties. The number of jobs retained with PPP loan dollars among Tennessee food and beverage firms by county during April 3-June 30, 2020, is shown in Figure 5. Similar to the other maps, many of the jobs in the food and beverage industry that were retained are largely saturated around Tennessee's major cities.

**Table 4. PPP Loan Dollars Approved for Tennessee Food and Beverage Firms, by Firm Type, April 3-June 30, 2020**

Firm Type	Under \$150,000	\$150,000 and Over*	Total	Percent of 2018 Inflation Adjusted Annual Payroll from CBP**	PPP Dollars Approved Per Firm
Food Processors	\$6,853,256	\$34,975,000	\$41,828,256	2.5%	\$148,855
Beverage Manufacturers	\$5,579,796	\$6,500,000	\$12,079,796	5.3%	\$87,535
Grocery Wholesalers	\$4,275,656	\$23,325,000	\$27,600,656	2.6%	\$195,749
Alcoholic Beverages Wholesalers	\$949,655	\$35,050,000	\$35,999,655	16.0%	\$719,993
Food Stores	\$27,762,236	\$31,000,000	\$58,762,236	6.6%	\$52,048
Beverage Stores	\$10,382,045	\$1,750,000	\$12,132,045	16.8%	\$31,926
Specialty Food Services and Restaurants	\$212,111,584	\$529,750,000	\$741,865,584	16.6%	\$135,923
Drinking Places	\$8,582,237	\$22,050,000	\$30,632,237	26.0%	\$119,192
All Firm Types	\$276,500,465	\$684,400,000	\$960,900,465	11.0%	\$122,658

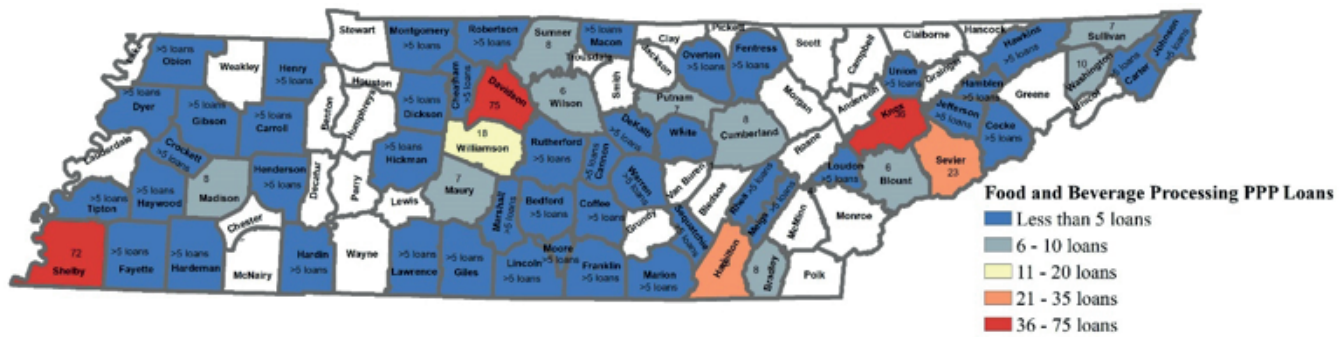
\*Data for loans valued at \$150,000 and greater were provided as ranges. The midpoint of each range was used in calculating an estimate of loan dollar values.

\*\*The ratio of March 2020 and March 2018 Consumer Price Indexes (CPI) for the Southeast region were used to adjust the data (248.1/241.6). The CPI values were obtained from the U.S. Census Bureau.

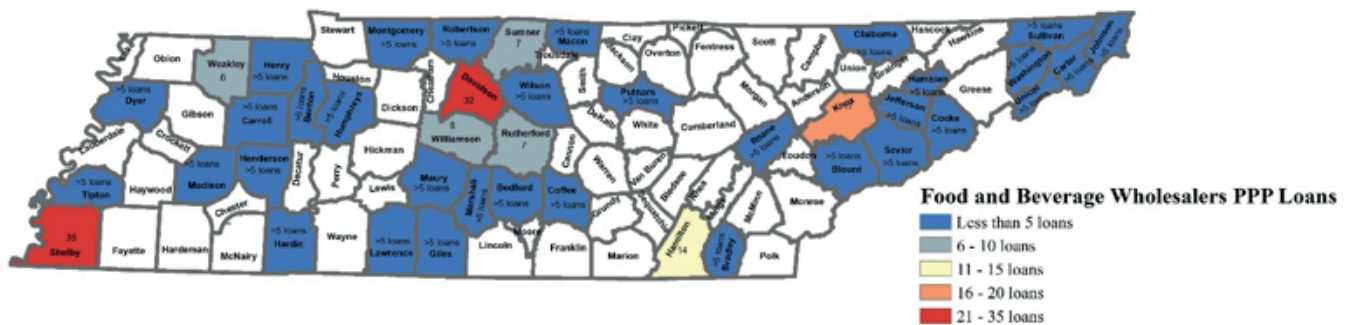
**Figure 2. Percent of PPP Loan Dollars Among Tennessee Food and Beverage Firms, by Firm Type, April 3-June 30, 2020.**



### a) Food and Beverage Processing PPP Loans



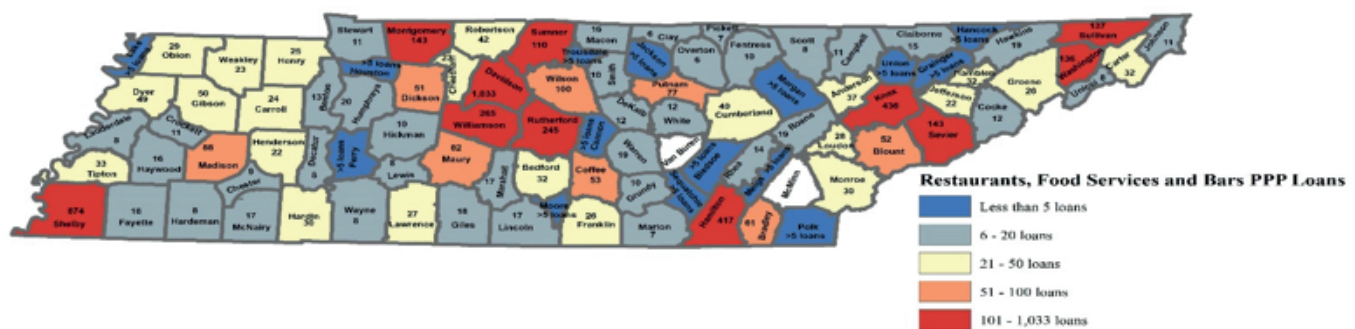
### b) Food and Beverage Wholesalers PPP Loans



### c) Food and Beverage Stores PPP Loans



#### **d) Restaurants, Food Services and Bars PPP Loans**

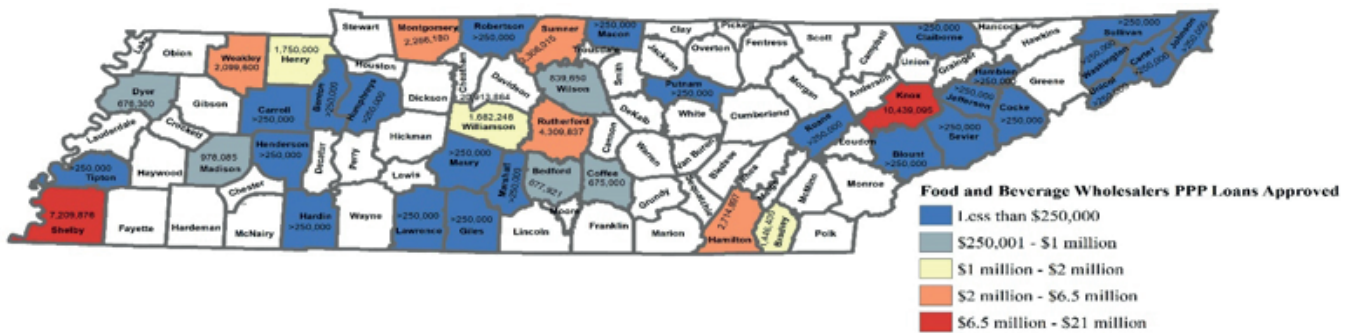


**Figure 3. Number of PPP Loan Applicants Among Tennessee Food and Beverage Firms, by County and Market Channel Level, April 3-June 30, 2020.**

### a) Food and Beverage Processing PPP Loans Dollars Approved



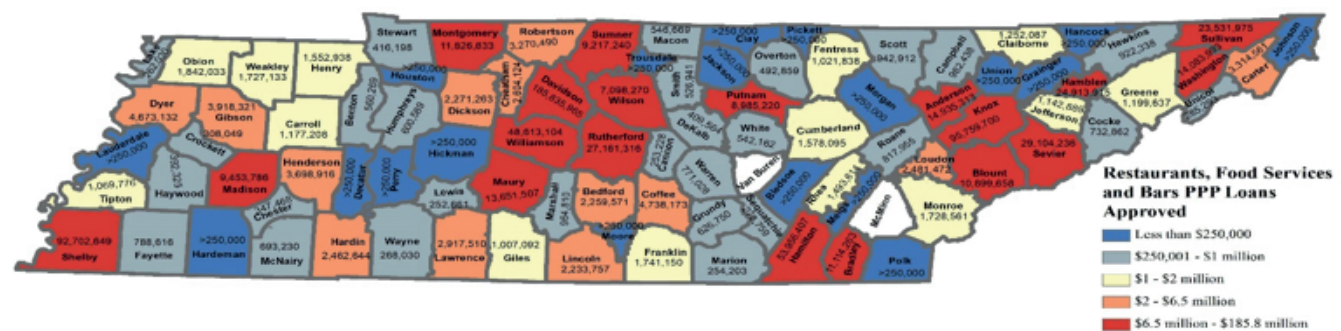
### b) Food and Beverage Wholesalers PPP Loans Dollars Approved



### c) Food and Beverage Stores PPP Loans Dollars Approved



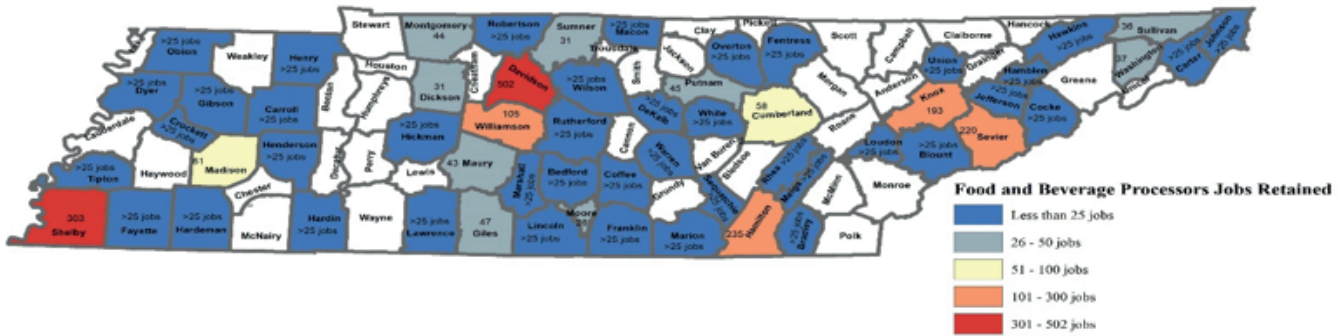
### d) Restaurants, Food Services and Bars PPP Loans Dollars Approved



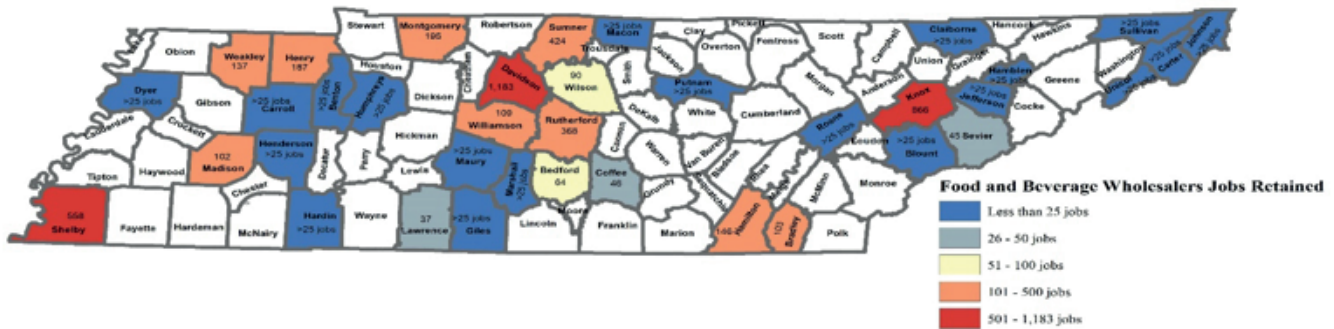
**Figure 4. PPP Loan Dollars Among Tennessee Food and Beverage Firms, by County and Market Channel Level, April 3-June 30, 2020.**



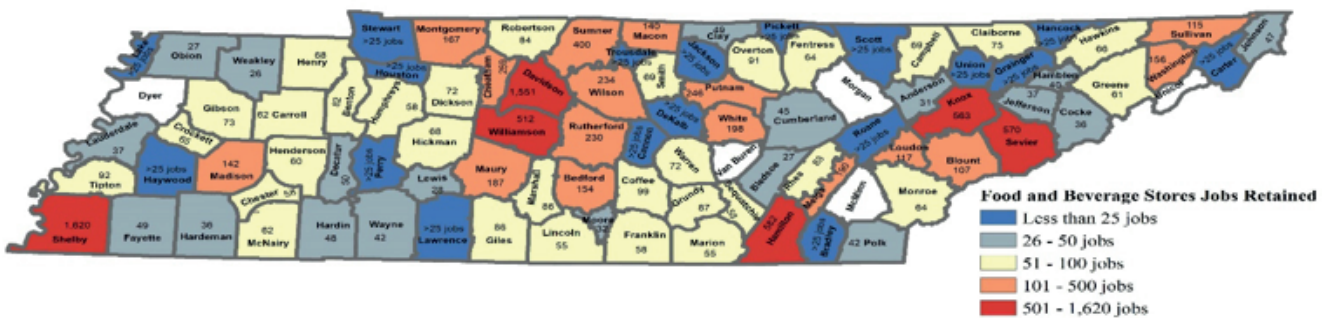
### a) Food and Beverage Processor Jobs Retained



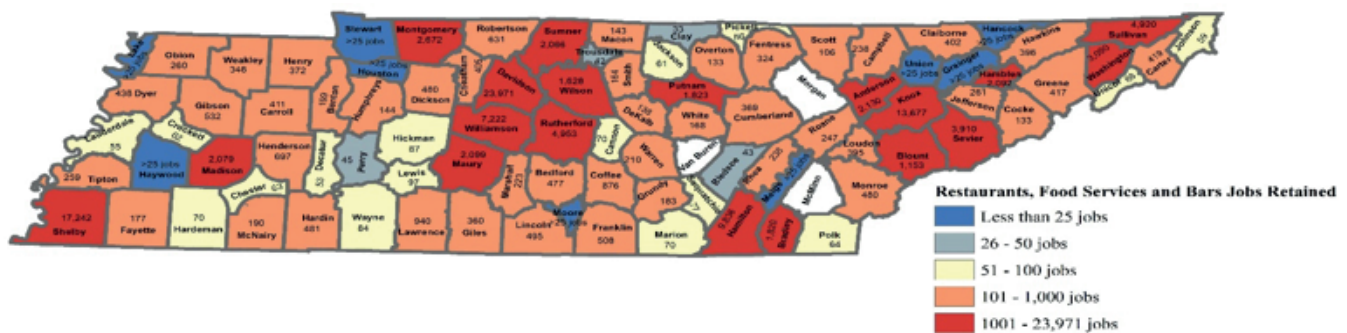
### b) Food and Beverage Wholesalers Jobs Retained



### c) Food and Beverage Stores Jobs Retained



### d) Restaurants, Food Services and Bars Jobs Retained



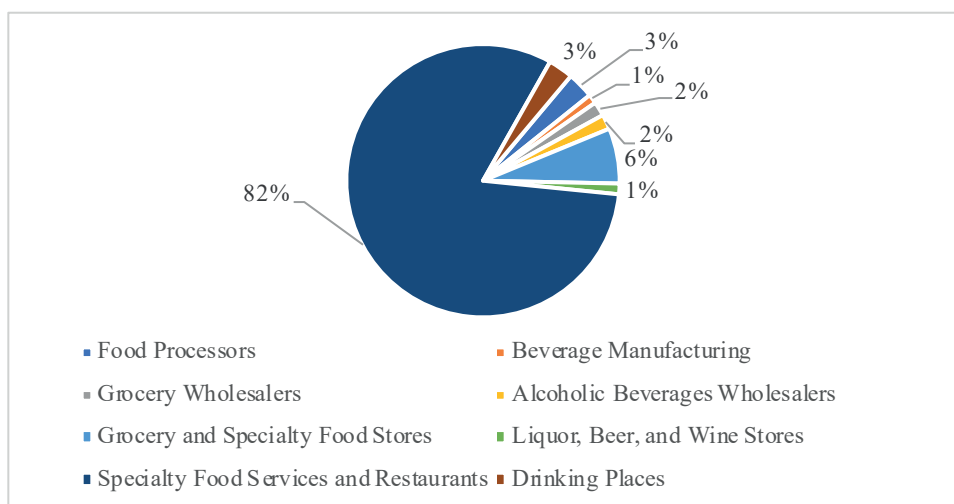
**Figure 5. Jobs Retained With PPP Loan Dollars Among Tennessee Food and Beverage Firms, by County and Market Channel Level, April 3-June 30, 2020.**

## Job Retention From PPP Loans Among Tennessee Food and Beverage Firms

A primary objective of the PPP was to assist firms in keeping employees on payroll during the pandemic. Hence, the number of jobs retained is an important measure of the PPP outcomes. As seen in Table 5 and Figure 6, firms indicated that 148,296 jobs were retained through the PPP. The majority of these came from restaurants and specialty food services at 121,333 jobs, representing 82 percent of total jobs retained by the industry. Next, grocery and specialty food stores accounted for 6 percent of all jobs retained, and the remaining firms accounted for 5 percent or less of the jobs retained. Just over 59 percent of the jobs retained were from loans equivalent to \$150,000 and over. Regarding the total number of jobs retained by larger loans ( $\geq \$150,000$ ) versus smaller loans ( $< \$150,000$ ) varied by industry sector. Eat-in establishments (food services, restaurants, drinking places), food processors and wholesalers (grocery and alcoholic beverage) had a larger total number of jobs retained from large loans than small loans. Conversely, beverage stores and manufacturers had a higher total number of jobs retained from small loans.

**Table 5. Total Jobs Retained With PPP Loans for Tennessee Food and Beverage Firms, by Firm Type, April 3-June 30, 2020**

Firm Type	Total Jobs Retained With PPP Loans, by Firm Type		
	Under \$150,000	\$150,000 and Over	Total
Food Processors	1,155	3,498	4,653
Beverage Manufacturers	871	748	1,619
Grocery Wholesalers	494	1,720	2,518
Alcoholic Beverage Wholesalers	152	2,454	2,606
Food Stores	5,979	3,754	9,733
Beverage Stores	1,713	163	1,876
Specialty Food Services and Restaurants	48,774	72,459	121,333
Drinking Places	1,621	2,741	4,362
All Firm Types	60,759	87,537	148,296



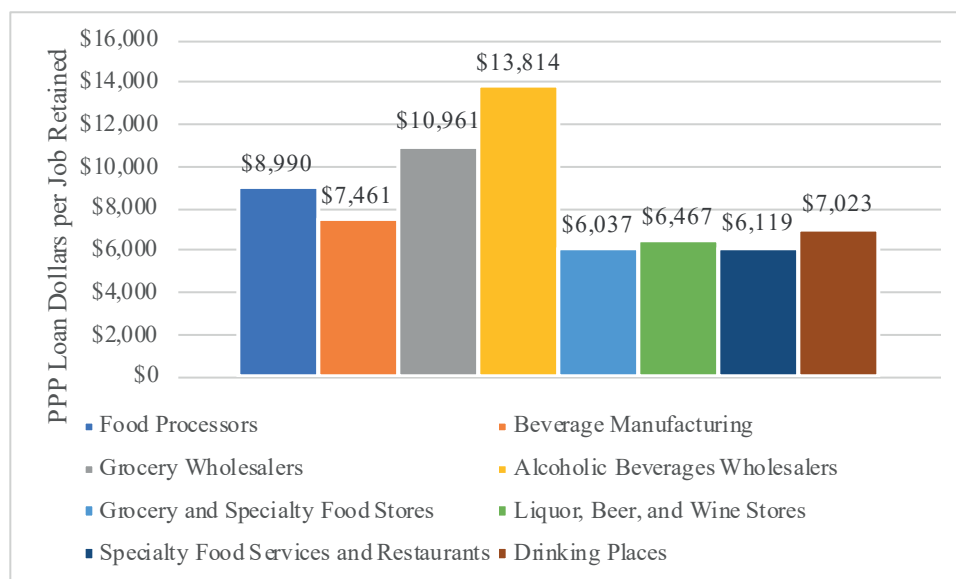
**Figure 6. Percent of Jobs Retained With PPP Loans by Tennessee Food and Beverage Firms, by Type, April 3-June 30, 2020.**

Table 6 summarizes the average number of jobs retained per firm and PPP dollars per job retained by firm type. On average, PPP loans resulted in 19 jobs retained per firm. The highest number per firm was 52.1 for alcoholic beverage wholesalers and the smallest was for beverage stores at 4.9.

**Table 6. Jobs Retained Per Firm With PPP Loans and PPP Dollars Per Job Retained for Tennessee Food and Beverage Firms, by Firm Type, April 3-June 30, 2020**

Firm Type	Jobs
Food Processors	16.6
Beverage Manufacturers	11.7
Grocery Wholesalers	17.9
Alcoholic Beverage Wholesalers	52.1
Food Stores	8.6
Beverage Stores	4.9
Specialty Food Services and Restaurants	22.2
Drinking Places	17.0
All Firm Types	19.0

Illustrated in Figure 7, the PPP loan amounts were divided by the jobs retained for each food and beverage industry type. The lowest PPP loan dollars per job retained were for food stores at \$6,037, followed by drinking places at \$6,119. The highest PPP loan dollars per job retained were for alcoholic beverages and food wholesalers. These ratios may, in part, reflect differences in wage rates. For example, using county business patterns for 2018, alcoholic beverage wholesalers had 3,762 employees with a payroll of \$219,326,000 or payroll per employee of \$58,300. However, for grocery stores, there were 41,203 employees with a payroll of \$840,077,000 or a payroll per employee of \$20,239.



**Figure 7. PPP Dollars Per Jobs Retained by Tennessee Food and Beverage Firms, by Type, April 3-June 30, 2020.**

## Conclusions and Implications

This analysis illustrates the importance of the PPP implemented under the CARES Act in fostering job retention in the food and beverages industry in Tennessee during the COVID-19 pandemic.

As of 2018, Tennessee's food and beverage industries constituted 15,416 establishments and employed more than 375,000 people. Combined, the payroll for these industries is more than \$8.48 billion. Under the PPP, during the first three months of the pandemic (April to June, 2020), reported loans helped retain more than 148,000 jobs in Tennessee's food and beverage industry. If these 148,000 jobs are calculated as a percentage of all food and beverage employees, the jobs retained with PPP dollars are just under 40 percent of all jobs in Tennessee's food and beverage industry. The restaurant industry, including specialty foods services, reported the largest number of jobs retained at more than 121,000 jobs.

In terms of dollar amounts, the food and beverage industry had nearly \$961 million in loans approved under the PPP during the April to June 2020 time period. This represents about 11 percent of payroll as reported in the 2018 CBP. Restaurants and specialty food services were approved for just under \$742 million, constituting the largest share of PPP loan monies among the food and beverage industries.

It should be noted that this report only contains the first wave of PPP loan funds administered. Further analysis should include the second wave of PPP loans that began in July, as that data becomes available. This information could be helpful in seeing how requests for PPP loans progress while the industry adapts their business practices during the pandemic and as business closures and limitations are lifted.

## References

- Bureau of Economic Analysis (BEA), United States Department of Commerce. 2020. "How Does the Paycheck Protection Program of 2020 Impact the National Income and Product Accounts (NIPAs)?" Available at: <https://www.bea.gov/help/faq/1408>. Accessed 7/28/2020.
- Centers for Disease Control and Prevention (CDC). 2020. "New ICD-10-CM Code for the 2019 Novel Coronavirus (COVID-19), April 1, 2020." Available at: [https://www.cdc.gov/nchs/data/icd/Announcement-New-ICD-code-for-coronavirus-3-18-2020.pdf?fbclid=IwAR1W4E21-xZbE-JdSG-RFewVZmuM72GGhiE2QIRyur\\_CPStp14uAa8gzhRXw](https://www.cdc.gov/nchs/data/icd/Announcement-New-ICD-code-for-coronavirus-3-18-2020.pdf?fbclid=IwAR1W4E21-xZbE-JdSG-RFewVZmuM72GGhiE2QIRyur_CPStp14uAa8gzhRXw). Accessed 10/26/2020.
- Gross, E. 2020. "Less Than Half of Americans Say They Will Eat at Restaurants Within a Month of the Coronavirus Curve Flattening." 2020. *Forbes*. July 1, 2020. Available at: <https://www.forbes.com/sites/elanagross/2020/07/01/less-than-half-of-americans-say-they-will-eat-at-restaurants-within-a-month-of-the-coronavirus-curve-flattening/#b5c42c7429a2>. Accessed 9/29/2020.
- Jensen, K.L., R. J. Menard, J. Yenerall, and D.W. Hughes. "COVID-19 Impact on Tennessee Household Food Sufficiency." Available at: [https://ag.tennessee.edu/arec/Documents/publications/AREC\\_COVID\\_RR01.pdf](https://ag.tennessee.edu/arec/Documents/publications/AREC_COVID_RR01.pdf). Accessed 7/28/2020.
- Soucheray, S. 2020. "U.S. Food Processing Plants Become COVID-19 Hot Spots." Center for Infectious Disease Research and Policy. University of Minnesota. Available at: <https://www.cidrap.umn.edu/news-perspective/2020/04/us-food-processing-plants-become-covid-19-hot-spots>. Accessed 9/29/2020.
- State of Tennessee. 2020. "An Order Directing Tennesseans to Stay Home Unless Engaging in Essential Activities to Limit Their Exposure to and Spread of COVID-19." Executive Order No. 22. March 30, 2020. Available at: <https://publications.tnsosfiles.com/pub/execorders/exec-orders-lee22.pdf>. Accessed 7/28/2020.



U.S. Census Bureau. 2018. "2018 County Business Patterns." Available at <https://www.census.gov/programs-surveys/cbp/data/tables.html>. Accessed 7/28/2020.

U.S. Census Bureau. 2020. North American Industry Classification System. [https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart\\_code=11&search=2017%20NAICS%20Search](https://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart_code=11&search=2017%20NAICS%20Search). Accessed 7/28/2020.

U.S. Department of Treasury (U.S. Dept of Treasury). 2020a. "The CARES Act Works for All Americans." Available at: <https://home.treasury.gov/policy-issues/cares>. Accessed 7/28/2020. Accessed 7/28/2020.

U.S. Department of Treasury (U.S. Dept of Treasury). 2020b. "SBA Paycheck Protection Program Loan Level Data." Available at: <https://home.treasury.gov/policy-issues/cares-act/assistance-for-small-businesses/sba-paycheck-protection-program-loan-level-data>. Accessed 7/28/2020.

USDA- ERS. 2020. Food Service Industry – Market Segments. Available at: <https://www.ers.usda.gov/topics/food-markets-prices/food-service-industry/market-segments/>. Accessed 9/15/2020.

White House. 2020a. "Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak." March 13, 2020. Available at: <https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/>. Accessed 7/28/2020.

White House. 2020b. Coronavirus Guidelines for America. Available at: <https://www.whitehouse.gov/briefings-statements/coronavirus-guidelines-america/>. Accessed 9/24/2020.

World Health Organization (WHO), United Nations. 2020. "WHO Timeline-COVID-19." Available at: <https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19>. Accessed 7/28/2020.



UTIA.TENNESSEE.EDU