

Paycheck Protection Program Loans in Tennessee's Landscape Services Industry April 3-August 8, 2020

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Landscape service firms provide commercial landscaping services including design, installation and maintenance of turfgrass lawns, ornamental plant beds, gardens and other outdoor areas for private residences and commercial properties. In 2020, the U.S. landscaping services industry consisted of 510,000 firms who had a revenue of nearly \$102 billion and employed one million people with wages of \$32.9 billion (Diment, 2020). In Tennessee, the landscaping industry consists of 1,679 firms employing 12,475 workers with an annual payroll of \$424.5 million indicating an annual average wage of \$34,000 (U.S. Census Bureau, 2018). The majority (82 percent) of the industry's products and services are related to landscape maintenance activities (Diment, 2020). Thus, this industry's revenue is closely tied to new housing developments, the housing market (in general) and consumers' disposable incomes.

On March 11, 2020, the World Health Organization (WHO, 2020) declared the Novel Coronavirus Disease (COVID-19) a pandemic. Shortly after, on March 13, 2020, the COVID-19 outbreak was declared a national emergency by President Trump (White House, 2020). Actions were taken to decrease community spread and Americans were encouraged to stay home, avoid large group gatherings and avoid unnecessary outings. Aligning with these directions, Tennessee's Governor Lee passed the Executive Order No. 22 (EO 22) encouraging people to stay at home except for essential activities or services (State of Tennessee, 2020). Under EO 22, landscape management was deemed an essential infrastructure operations service and landscaping firms were allowed to remain open. However, several factors related to the COVID-19 pandemic and economic downturn could negatively impact the landscaping service industry. For example, businesses who closed or reduced their activities could influence product availability through supply chain disruptions, as well as customers' employment and disposable incomes potentially dropping, reducing spending on non-essentials. Furthermore, the landscaping service industry is heavily influenced by the housing market which experienced a drop in March and April, 2020 potentially due to the

uncertainty caused by the pandemic (U.S. Census Bureau, 2020). Despite this momentary drop, the housing market rebounded and continued to have positive growth after those first few months of the pandemic meaning the impact of this drop on the landscape service industry was likely temporary.

In order to mitigate potential economic hardships from the pandemic, the Coronavirus Aid, Relief and Economic Security (CARES) Act was passed on March 27, 2020 (U.S. Department of Treasury, 2020). As part of the CARES Act, the Paycheck Protection Program (PPP) was implemented and administered by the Small Business Administration through local lending firms. The goal of the PPP was to provide support for payroll and other operating expenses to small businesses during the pandemic and economic downturn. The PPP provided over \$660 billion in forgivable loans (Bureau of Economic Analysis, 2020). This report summarizes the PPP loans approved to landscaping service firms in Tennessee and several neighboring states to provide an overview of the aid and its influence in Tennessee's landscaping services industry.

Data Description

Metrics summarized in this report include the number of loans approved, geographical concentration of loan approvals, jobs retained through the program and loan amounts. Only loans up to \$150,000 were included in this analysis. Several neighboring states, including Alabama (AL), Georgia (GA), North Carolina (NC), South Carolina (SC) and Virginia (VA), were also analyzed for comparison purposes. The states were selected to align with the previous report on the nursery and greenhouse industry and the Paycheck Protection Program (Rihn & Jensen, 2020). The PPP loans, sourced from the U.S. Department of Treasury on September 2, 2020, includes data from April 3, 2020, through August 8, 2020. At the time of this report, data was not available for the PPP after August 8, 2020. The 2017 North American Industry Classification (NAICS) codes were used to isolate and extract data on the landscaping service industry. Specifically, the NAICS code 561730 - "Landscape services" was used in this report which includes firms engaged in "landscape care and maintenance services and/or installing trees, shrubs, plants, lawns or gardens" and firms who provide "these services along with the design of landscape plans and/or the construction (i.e., installation) of walkways, retaining walls, decks, fences, ponds and similar structures."

Paycheck Protection Program Loans to Tennessee Landscaping Service Firms

The number of PPP loans approved to landscaping service firms by month of approval is presented in Figure 1. Landscaping service firms in the surveyed states primarily obtained PPP loan approval in April with 54 percent of all landscape service firm PPP loans, followed by May (21 percent), June (10 percent), July (9 percent), and August (6 percent). Georgia received the greatest number of approved loans at 1,533 loans, followed by North Carolina (1,328 loans), Virginia (1,055 loans), Tennessee (1,055 loans), South Carolina (781 loans) and Alabama (718 loans).

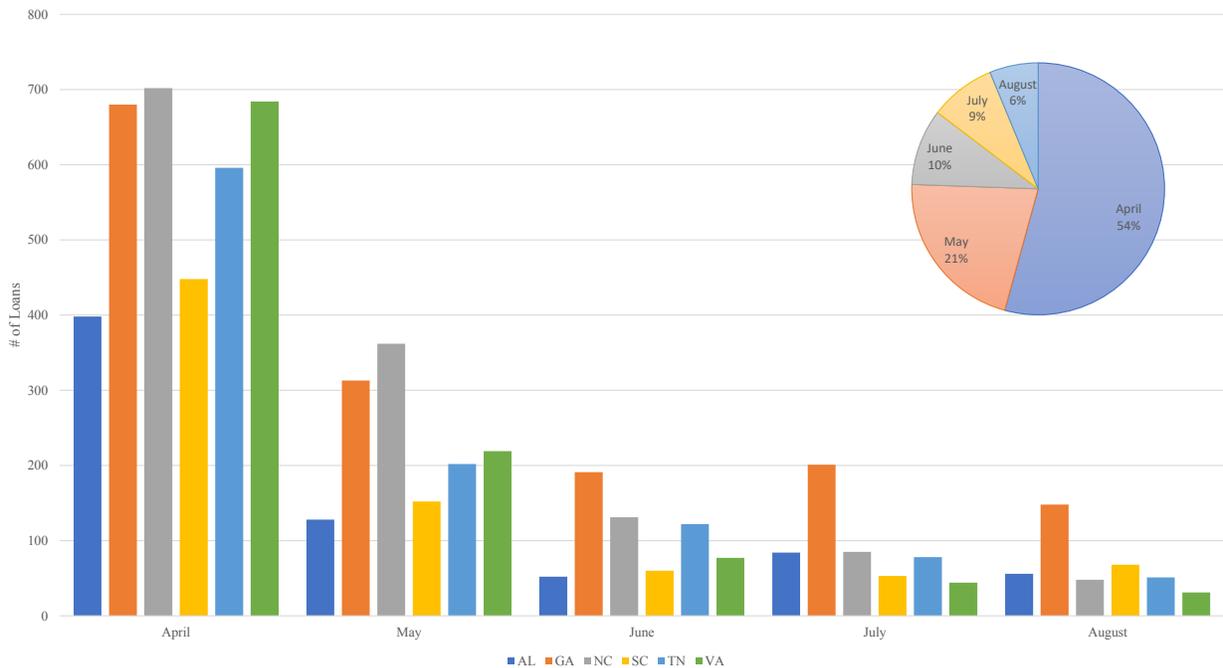
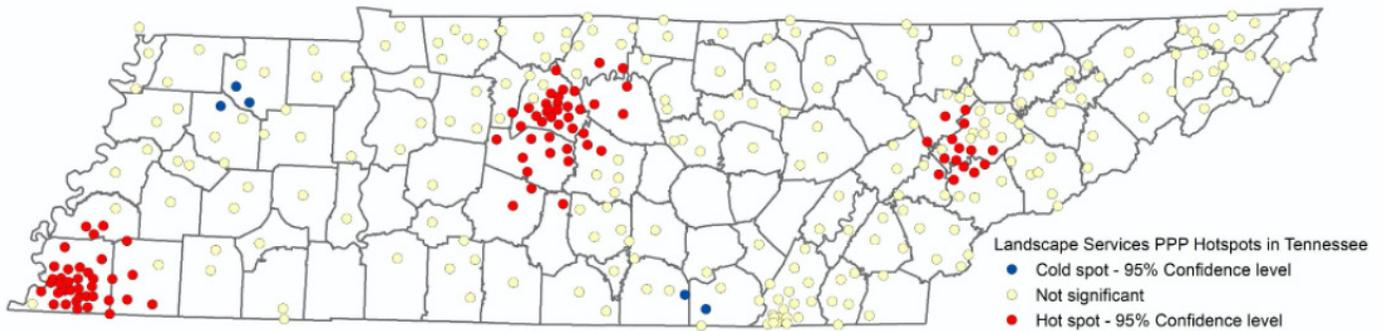


Figure 1. Number of PPP Loans to Landscaping Service Firms, by Month of Approval

The geographical hotspot distribution of the landscaping service firms who received PPP loan approvals is shown in Figure 2. The hotspot (Getis-Ord G_i^*) statistic tool in ArcGIS was used to generate the maps. The resultant Z score identifies statistically significant spatial clusters (95 percent) of high values identified as hot spots (red dots) and low values identified as cold spots (blue dots). The yellow dots indicate that no statistically significant spatial clusters are identified in those locations. In Tennessee, most of the PPP loans were approved near large urban areas including Nashville, Memphis and Knoxville. Rural areas identified as cold spots include Stewart, Henry, Marion and Franklin counties who received fewer loans. This result is consistent with landscaping service firms being larger and more concentrated in areas where their customer bases are located (i.e., homeowners and businesses with properties to maintain). Additionally, higher income households tend to be clustered around larger urban centers and metropolitan areas (Semega et al., 2020). A similar trend was observed in the neighboring states (Figure 2). Notably, landscaping service firms near Norfolk, VA, Charleston, SC, and the suburbs of Washington D.C. in northeastern Virginia had high concentrations of landscaping service firm loan approvals. The spatial cluster maps of Tennessee and Southeast U.S. differ slightly because of the higher number of loans approved in Georgia and North Carolina as compared to Tennessee (Table 1).

A. Tennessee Landscaping Service Firms' PPP Loan Approval Locations



B. Surrounding States' PPP Loan Approval Locations

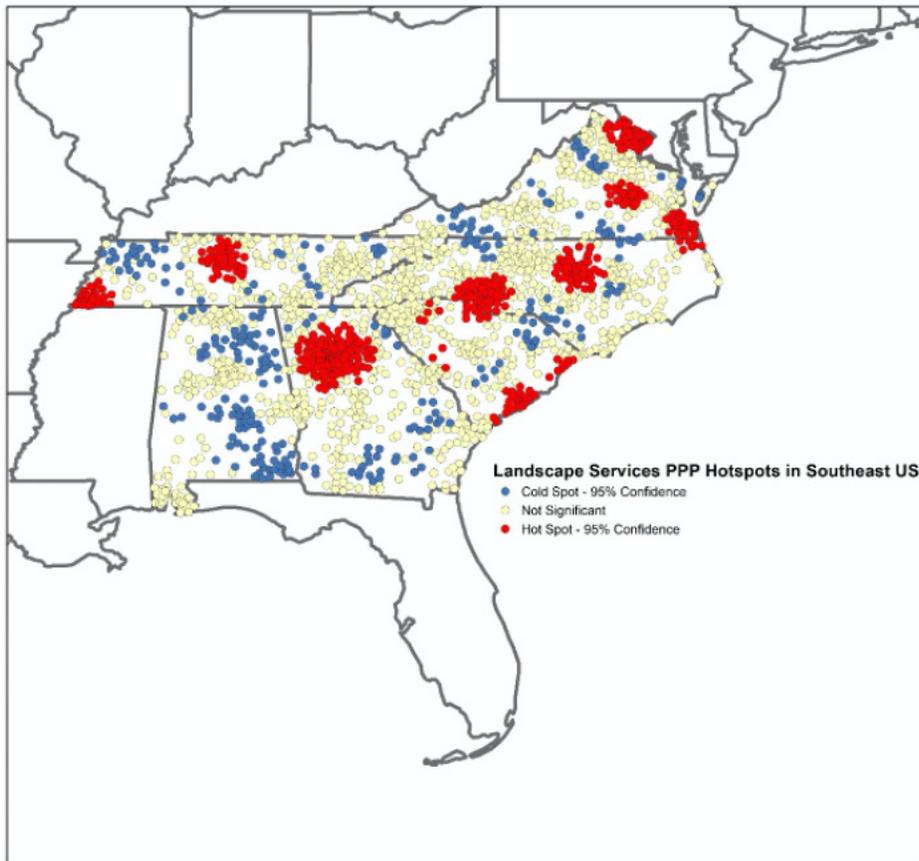


Figure 2. Geographical Distribution of PPP Loans Approved to Landscaping Service Firms for Tennessee (A) and the Surrounding States (B)

Jobs Retained

The number of jobs retained in the landscape service industry through PPP loans is reported in Table 1. In total, PPP loans accounted for 28,240 jobs retained in the surveyed states. In Tennessee, 842 firms received PPP approval for loans with the PPP loans resulting in 4,257 jobs retained or 15 percent of all jobs retained in the surveyed states. North Carolina had a total of 6,938 jobs retained (25 percent of the total), while Georgia had 22 percent of the total jobs retained, followed by Virginia, Tennessee, South Carolina, and Alabama.

Table 1. Number of Jobs Retained from PPP Loans to Landscape Service Firms

State	Total No. of Loans Approved	Total No. of Jobs Retained	Percent of Total Jobs Retained
AL	620	2,555	9%
GA	1,447	6,235	22%
NC	1,074	6,938	25%
SC	675	3,787	13%
TN	842	4,257	15%
VA	688	4,468	16%
TOTAL	6,160	28,240	100%

Note: Only firms that received PPP loan approval and indicated greater than one jobs retained were included in this table.

PPP Loan Amounts

The landscaping service firms in the surveyed six states received approval for \$175 million in PPP loans (Table 2). North Carolina received approval for the most at nearly \$42 million, followed by South Carolina (\$38.8 million), Alabama (\$28.4 million), Virginia (\$27.6 million), Tennessee (\$22.6 million), and Georgia (\$15.9 million). The average amount per job retained was \$6,197. Alabama landscape service firms averaged a little over \$11,000 per job retained. South Carolina's loans were just over \$10,000 per job retained, Virginia's average loan per job retained was nearly \$6,188, North Carolina's loan per job retained was \$6,010, Tennessee averaged \$5,297 per job retained, and Georgia averaged \$2,554 per job retained. Georgia retained the highest number of jobs per PPP loan at nearly 4 jobs per \$10,000 approved, followed by Tennessee (1.9 jobs/\$10,000 approved), North Carolina, Virginia, South Carolina and Alabama.

Table 2. Total PPP Loan Amounts and by Number of Jobs Retained

State	Loan Amount	Average Loan Amount Per Job Retained	Jobs Retained Per \$10,000 Loans Approved
AL	\$ 28,403,842.00	\$ 11,116.96	0.90
GA	\$ 15,925,874.00	\$ 2,554.27	3.92
NC	\$ 41,697,024.00	\$ 6,009.95	1.66
SC	\$ 38,771,336.00	\$ 10,238.01	0.98
TN	\$ 22,550,145.00	\$ 5,297.19	1.89
VA	\$ 27,646,012.00	\$ 6,187.56	1.62
TOTAL	\$ 174,994,233.00	\$ 6,196.68	1.61

Note: Only firms that received PPP loan approval and indicated greater than one jobs retained were included in this table.

The distribution of the PPP loans approved by amount are presented in Figure 3. Overall, small loan amounts (\$30,000 or less) were the most prevalent in the landscape service industry. Alabama, Georgia and Tennessee had the largest proportions of loans that were \$30,000 or less with 78 percent, 71 percent and 70 percent of approved loans, respectively. Although North Carolina and South Carolina had a large portion of loans in this category (59 percent and 65 percent), they also had larger proportions of their states' loans in the more than \$30,000 category. Virginia presented an interesting distribution with 17 percent of its loans being approved in the \$125,001 to \$150,000 range while 50 percent of the loans were in the \$30,000 or less category.



Note: Only firms that received PPP loan approval and indicated greater than one jobs retained were included in this table.

Figure 3. Distribution of PPP Loan Amounts Approved to Landscape Service Firms

Summary

Together, the information in this report provides an overview of landscaping service firms' participation in the PPP and its influence on job retention in this industry for Tennessee and neighboring states. The PPP serves to mitigate negative economic impacts on small firms and aid in contributing to economic recovery. In the landscaping service industry, PPP loans helped retain an average of 5.4 jobs per firm for a total of 28,240 jobs in Tennessee and the surrounding states. In Tennessee, the program provided nearly \$22.6 million to landscaping service firms which amounted to 4,257 jobs. Seventy percent of the loans approved to Tennessee landscaping service firms were for amounts less than \$30,000 with firms primarily being located near large customer bases (i.e. urban centers).

Although this report summarizes the PPP loans in Tennessee's landscaping service industry, it does not reflect multiplier effects through the state and surrounding state's economies. Beyond payroll and operating expenses, PPP loans likely also contribute to local economies through employee spending and other activities. This information was not analyzed in this report. Furthermore, the results presented here are only through August 8 and additional PPP loans will likely be approved in the second wave of the program given the continuation of the pandemic and its influence on the economy.

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