AF&PA Congressional District Impact

Methodology and Documentation

Prepared for

The American Forest and Paper Association 1101 K Street, NW, Suite 700, Washington, DC 20005



By

John Dunham & Associates

June 2021

Methodology:

The American Forest and Paper Association (AF&PA) Congressional District Impact model measures the employment, wages, and value of shipments for each of the 435 congressional districts and for the District of Columbia's delegate district. Data for this study was provided by the AF&PA, ¹ the US Department of Commerce, US Census Bureau, ² and Data Axle. ³

The forestry, wood and paper industries are defined by the AF&PA as forestry and logging, wood product manufacturing, and paper and pulp manufacturing. Wages in this impact are defined the same. Value of shipments in the industry represent only wood products and paper manufacturing.

Publicly available data at the congressional district level is limited by disclosure restrictions, especially for smaller sectors of the economy. This model therefore uses actual physical location data provided by Data Axle allocating jobs by zip code and NAICS code. The zip code data are then mapped to districts.

For zip codes entirely contained in a single congressional district, jobs are allocated based on the percentage of total sector jobs in each zip code. For zip codes that are broken by congressional districts, allocations are based on the percentage of the physical area of the zip code located in each district, weighted by the proportion of roads. This allocates more jobs to more developed area of each zip code.

Based on the NAICS assigned to each industry by the AF&PA (listed below), JDA calculated the percent of employment in these corresponding NAICS codes in each zip code in a state. These percentages are then used to distribute the data from AF&PA's study across congressional districts.

Table 1 NAICS Codes Used in the Analysis

113	Forestry & Logging
321	Wood Product Manufacturing
322	Paper & Pulp Manufacturing

Once jobs are allocated to districts, the percent of jobs in each district is used to assign wages and value of shipments. This method pushes wages and shipments to districts where workers in the industry are operating.

All data described above can be found in the report, by congressional district. Where there are zeros, there are no jobs, wages or value of shipments in that category in that district. Where there is an N/A, data on that industry is not available at the state level and therefore the district level. Districts where N/A is present do not display a total, to further clarify that there is missing data.

District boundaries are from *TIGER/Line Shapefiles*, US Department of Commerce, Bureau of the Census, at: https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html

Data is based on the AF&PA's Economic Impact Study, 2020

Data Axle is the leading provider of business and consumer data for the top search engines and leading incar navigation systems in North America. Infogroup gathers data from a variety of sources, by sourcing, refining, matching, appending, filtering, and delivering the best quality data. Data Axle verifies its data at the rate of almost 100,000 phone calls per day to ensure absolute accuracy.