

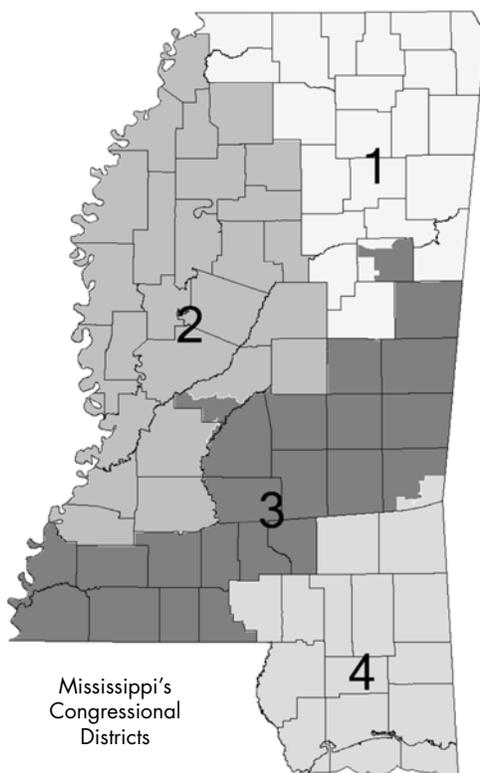
# Economic Impact of Forestry and Forest Products on Mississippi's First Congressional District



Forestry and the forest products industry have a substantial impact on the economy of Mississippi's First Congressional District. The purchase of goods and services by this industry and its employees spurs economic activity in other sectors of the economy. It is estimated that forestry and the forest products industry have a total economic impact of \$5.9 billion in total industry output, \$2.4 billion in value-added, \$1.6 billion in wages and salaries, and 34,088 jobs. In addition, the tax impact was estimated to be \$417.7 million, with \$278.2 million in federal and \$139.5 million in state and local taxes.

These results were obtained using Impact Analysis for PLANning (IMPLAN), an input-output model. Using input-output analysis to track how the inputs of one sector of the economy are the outputs of other sectors can allow for a greater appreciation of the economic importance of a sector or group of sectors to the overall economy. Using 2011 data and the IMPLAN model, this study estimates the total economic contribution of forestry and the forest products industry within Mississippi's First Congressional District.

This is measured by examining how spending by the forestry and forestry products industry impacts the entire economy using four key statistics: total industry output (total value of production), value-added (payments made to workers, interest, profits, and indirect business taxes), wages and salaries (employee compensation), and employment (the number of full- and part-time jobs). For each of the four key statistics, the direct, indirect, and total economic impacts were estimated. The direct impacts are the actual expenditures and employment of the forestry and forest products industry sectors (forestry services,



logging, solid wood products, pulp and paper, and wood furniture manufacturing). The direct impacts are then used to measure the purchase of goods and services by the forest products industry's supporting industries (i.e., indirect impact) and the purchases of consumer goods and services by employee households associated with direct and indirect effects (i.e., induced impact). These impacts together give the total economic impact.

The IMPLAN model tracks inter-industry spending and summarizes the economy into a 440-industry sector model. For reporting purposes, the results of this analysis were simplified by combining the 440 sectors to 17 sectors representing the entire economy, including the five

forestry- and forest products-related sectors.<sup>1</sup>

The forestry and forest products impacts on the economy of Mississippi's First Congressional District are summarized below and detailed in **Table 1**.

Forest-related economic activity generated 34,088 jobs and \$1.6 billion in income during 2011. That's 9.4 percent of jobs and 10.7 percent of income in the district. Forestry and the forest products industry generated \$5.9 billion or about 12.1 percent of economic output in the district. The value of all goods and services produced is defined as total output. Value-added amounted to more than \$2.4 billion, or about 10.6 percent of all value-added in the district. Value-added represents the creation of new wealth.

Forest-related economic activity contributed an estimated \$417.7 million in tax revenue for federal, state, and local governments. This total includes estimated tax revenues of \$278.2 million for federal and \$139.5 million for state and local governments.

<sup>1</sup> For more detail on combining the 440 sectors to 17 sectors, please see The Economic Impact of Forestry and the Forest Products Industry on Mississippi's Congressional Districts, Forest and Wildlife Research Center, Research Bulletin FO 438, Mississippi State University.

**Table 1. Impacts of forest-related sectors on employment, income, output, and value-added in Mississippi's First Congressional District.**

	Number of jobs	% of district	Income (\$)	% of district	Output (\$)	% of district	Value-added (\$)	% of district
<b>Direct impact from forest-related sectors</b>								
Forestry services	96	0.03	4,856,290	0.03	30,241,697	0.06	12,405,551	0.06
Logging	1,235	0.34	29,951,870	0.21	74,107,841	0.15	23,970,593	0.11
Solid wood products	2,536	0.70	109,774,904	0.76	507,408,023	1.04	132,061,895	0.59
Pulp and paper	1,604	0.44	163,908,573	1.13	835,954,040	1.72	242,777,045	1.09
Wood furniture	15,361	4.21	760,725,358	5.25	2,650,036,355	5.44	1,087,893,445	4.90
Subtotal	20,832	5.71	1,069,216,995	7.38	4,097,747,958	8.41	1,499,108,529	6.75
<b>Indirect and induced impacts on sectors</b>								
Retail and wholesale trade	2,783	0.76	103,546,179	0.71	250,644,376	0.51	170,757,369	0.77
Services	2,633	0.72	88,041,308	0.61	222,063,485	0.46	120,810,711	0.54
Construction and manufacturing	2,056	0.56	95,797,359	0.66	572,235,831	1.17	164,747,595	0.74
Food services	1,208	0.33	20,794,836	0.14	63,025,220	0.13	30,321,667	0.14
Transportation and warehousing	1,169	0.32	52,693,211	0.36	151,946,753	0.31	68,578,947	0.31
Health care	1,142	0.31	64,652,847	0.45	120,823,486	0.25	70,747,450	0.32
Real estate, finance, and insurance	1,035	0.28	24,881,009	0.17	289,594,847	0.59	178,746,921	0.80
Agricultural production and services	450	0.12	7,040,576	0.05	15,580,941	0.03	6,781,056	0.03
Hotels and entertainment	235	0.06	4,440,690	0.03	16,565,693	0.03	7,968,951	0.04
Government	206	0.06	13,463,510	0.09	43,121,880	0.09	18,638,299	0.08
Education	189	0.05	4,310,555	0.03	8,459,349	0.02	5,157,787	0.02
Food and fiber products	149	0.04	7,070,855	0.05	41,791,026	0.09	9,437,596	0.04
Subtotal	13,256	3.64	486,732,937	3.36	1,795,852,888	3.68	852,694,349	3.84
Total impact	34,088	9.35	1,555,949,932	10.74	5,893,600,846	12.09	2,351,802,878	10.59
Rest of district	330,577	90.65	12,929,354,341	89.26	42,843,795,794	87.91	19,859,400,440	89.41
Total in district	364,664	100.00	14,485,304,273	100.00	48,737,396,639	100.00	22,211,203,317	100.00

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