



IHS Markit®

The economic impact of advertising on the US economy

2018 – 2026

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The Advertising Coalition

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Disclaimers

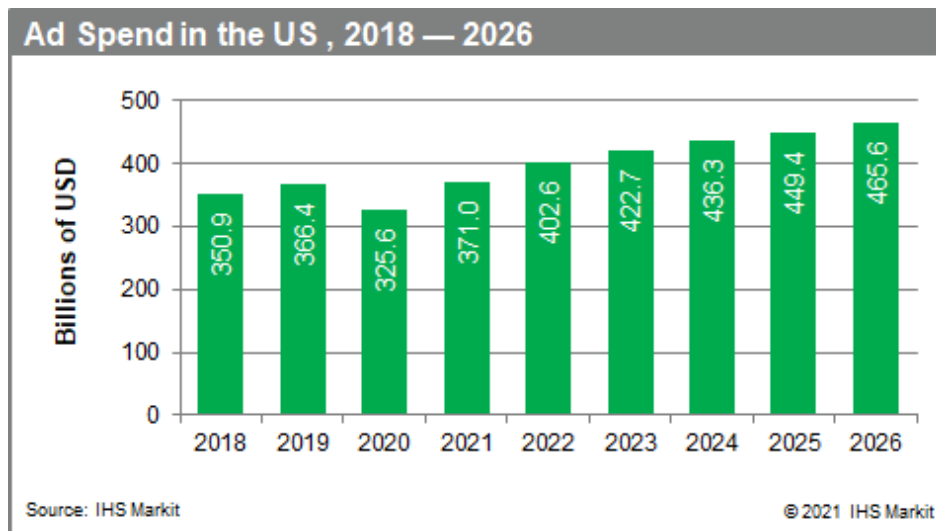
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Introduction

Billions of dollars are spent on advertising in the United States each year. From billboards to internet ads, these expenditures are intended to stimulate demand, inform customers, and differentiate products and services in the marketplace. The resulting heightened awareness among buyers does more than merely shift market share among competing firms; it stimulates purchases and generates additional economic activity that would not have occurred otherwise. These incremental sales trigger a cascade of economic activity and stimulate job creation and retention throughout the US economy.

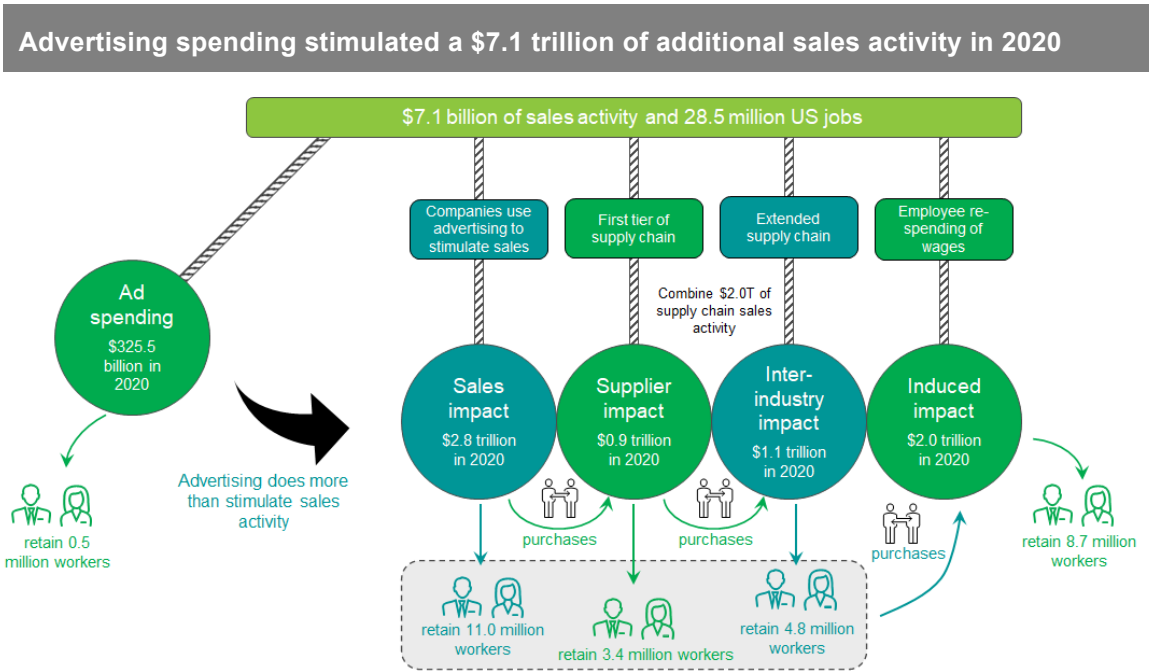
Spending by US companies on advertising hit an historical peak of \$366.4 billion in 2019. This was followed by an 11.1% contraction to \$325.6 billion in 2020, largely due to the COVID-19 pandemic. After recovering to pre-pandemic levels during 2021, ad spend will reach \$465.6 billion in 2026. This represents an annual growth rate of 4.6% from 2021 to 2026, slightly faster than the projected 4.5% growth rate for US gross domestic product (GDP).



IHS Markit conducted a comprehensive assessment of the total economic impact of advertising expenditures across 20 industries for the United States plus all 50 states and Washington DC. The economic impact of advertising consists of: (1) advertising expenditures; (2) advertising-driven sales; (3) supplier sales; (4) interindustry sales; and (5) sales due to employees of these firms re-spending some of their wages in their communities. All of this economic activity creates and maintains jobs that are needed to support a higher level of production. The goal of this study was to quantify the level of

economic activity and employment that are attributable to the stimulative effects of advertising.

In 2020, the US economy posted \$36.7 trillion in sales activity. Of that, \$2.8 trillion in sales were directly stimulated as a result of the \$325.6 billion that companies spent to advertise their products and services. Thus, about 7.6% of US sales activity is **directly** stimulated by advertising. However, as depicted in the following graphic, fulfilling the direct sales initiates follow-on activity throughout the economy as dollars flow through supply chains, driving an additional \$2.0 trillion in **indirect** sales. The economic stimulation does not end there: companies and their suppliers hire and pay employees, who, in turn, spend some of their income in the economy on consumer goods and services. These **induced** consumer effects amounted to an additional \$2.0 trillion in 2020. Thus, the initial \$325.6 billion in ad spending drove an additional \$6.8 trillion in sales. This equates to each dollar of ad spending in 2020 leveraging almost \$21 in sales activity. The combined \$7.1 trillion (ad spend + stimulated sales activity) means that 19.4% of the \$36.7 trillion in total sales generated in the US economy was attributable to advertising expenditures in 2020.



The stimulated sales activity triggers additional economic benefits. Employees must be hired or retained in order to make and deliver goods and services. Companies reap additional profits and make larger contributions to US gross domestic product (GDP). Plus,

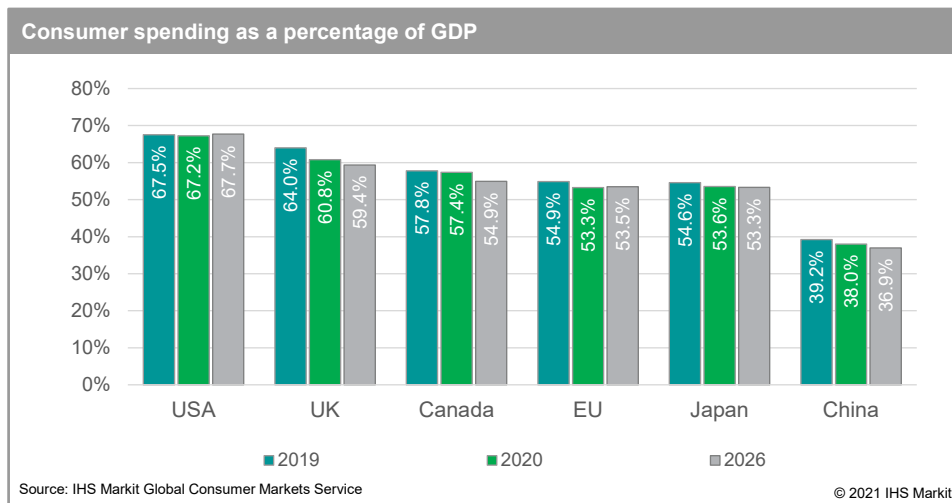
companies and employees pay state, local and federal taxes. For example, IHS Markit estimates that, in 2020, advertising expenditures stimulated the following contributions to the US economy:

- Advertising supported \$7.1 trillion (or 19.4%) of the \$36.7 trillion in US output and 28.5 million (or 19.5%) of the 145.7 million US jobs
- Every dollar of ad spending supported, on average, about \$21 of economic output (sales)
- The total impact of advertising represented 18.5% of US GDP
- For every million dollars spent on advertising, 83 American jobs were supported across a broad range of industries, throughout the economy
- Every direct advertising job supported another 51 jobs across industries
- Labor income supported by advertising represented 18.2% of all personal and proprietor income in the United States
- The average salary for jobs ultimately supported by advertising was over \$73K or 12% above the national average.

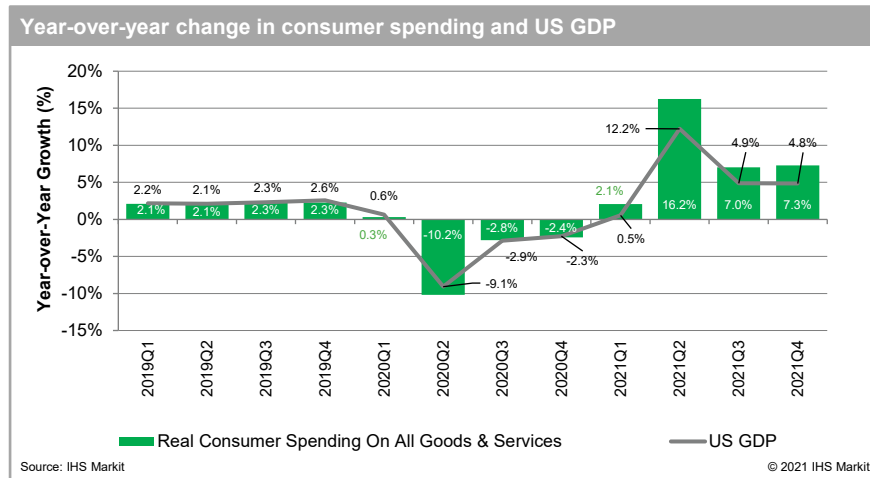
Advertising plays a vital role in the US Economy

A primary role of advertising is to stimulate purchase activity by informing and educating consumers and businesses about the choices available to them in the marketplace. Depending on the situation, advertising may: promote brand image; create awareness of and demand for new products, technologies, and applications; influence market share within an industry or product category; alter the distribution of spending among substitute products.

Consumer spending accounts for about 68% of the US economy. The United States has a higher dependence on personal consumption relative to other large, advanced economies (see graph below). Further, while the consumer sector's share of GDP is shrinking in many of these countries, the US share will continue to hover around 68% throughout the 2026 forecast horizon. Even as US GDP declined by 2.2% during COVID-19 pandemic of 2020, the consumer share of GDP remained fairly stable.

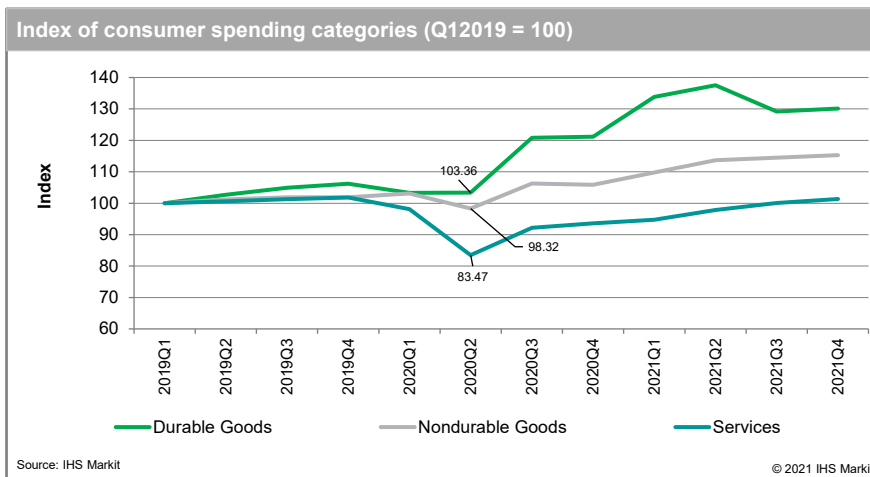


In 2020, the US economy faced multiple challenges related to the COVID-19 pandemic. The following chart shows how closely the year-over-year change to real consumer spending and US GDP tracked before and during the pandemic. The lockdowns imposed across the nation suspended or severely limited much economic activity, particularly consumers' ability to spend on many services, including travel, public transportation, cultural events, going restaurants, and so on. As a result, both consumer spending and US GDP significantly declined, particularly during the second quarter of 2020 when they declined by 10.2% and 9.1%, respectively.



Consumer spending patterns also shifted during the pandemic. As previously mentioned, spending on services precipitously dropped during the second quarter of 2020. For example: spending on public transportation dropped 80.5%, accommodations 74.4%, recreation services 49.0%, and transportation services 39.7%. However, the lockdowns also required many consumers to adapt to work from home environments. So, while overall consumer spending on services declined 14.3% during the second quarter of 2020, spending on durable goods—which includes furniture, computer hardware, and communications equipment—only dropped 0.3%. Nondurable goods (such as food prepared at home and clothing) decreased by 1.2%.

The graph below shows US consumer spending by category indexed to the pre-pandemic first quarter of 2019. Spending on services dropped to an indexed value of 83.47 in the second quarter of 2020 and recovered to pre-pandemic levels in the third quarter of 2021. Spending on durable goods never dropped below an indexed value of 100, while spending on nondurable goods only dipped below 100 during one quarter.



The shifting consumer spending patterns during pandemic underscored a key reason advertising is recognized to be a positive factor in the economy: it efficiently provides information about the attributes and prices of products and services. This was particularly important as consumers sought solutions to work from home environments, and so on.

In general, the US economy benefits from advertising in four primary ways.

- First, it is a cost-effective and timely mechanism for distributing information about prices and beneficial changes in technology and product design than are individuals independently searching for that information
- Second, through the wide dissemination of product price information, it encourages less variation in prices, as suppliers strive to attract customers
- Third, it may speed the implementation of new technology
- Fourth, it may encourage greater economies of scale in the production process by allowing individual firms to attract a wider array of customers.

This study analyzed the impact of total advertising expenditures in 20 user industries, tracked the linkages among all suppliers to the industries that leverage advertising to sell and promote their products and services, and disaggregated the results for all states and congressional districts in the United States. Thus, the information presented in the study provides a comprehensive view of advertising's contribution to US national and regional economic activity.

Assessing the economic contributions of advertising

The impact of advertising spending is assessed by quantifying the level of sales, employment, value-added, labor income, and taxes that are attributable to spending on advertising. Advertising increases sales, which then boosts production and helps create and maintain jobs across every industry, state, and congressional district in the United States. IHS Markit assessed the economic impact of advertising expenditures by first estimating the effect of advertising on sales. Using historical data for advertising expenditures collected from the IRS Statistics of Income database for each industry, an equation was estimated to identify how sensitive sales are to ad spending in each industry. As expected, some industries are more dependent on advertising to generate sales than others. These output (sales) estimates became inputs to our models for estimating the supply-chain and induced impacts in employment, sales, value added and labor income.

The modelling approach used to conduct this study, which was first developed by Dr. Lawrence R. Klein (recipient of the 1980 Nobel Prize in Economics), has been adapted to account for the changes in the structure of the US economy. The results obtained from the models:

- quantify the total economic impact throughout the US economy due to advertising expenditures, not merely the isolated changes expected within the various media categories themselves; and identify both the economic activity attributed to and the jobs supported by all forms of advertising at all levels of economic activity.
- use the relationships between and among the industries that use advertising and their major markets and suppliers to track the follow-on ripples of activity throughout the economy not merely the sales directly attributable to the advertising activities
- utilize an integrated approach that combines the expertise of IHS Markit's industry and regional forecasting experts with IHS Markit's time-tested economic forecasting models and custom analysis regarding the uses and impacts of advertising by industry and geographic area in the economy

The economic contributions from advertising are initiated with business transactions between those companies that want to sell a product or service and those companies that can help increase awareness of that product or service. Consider a fictitious company, XYZ Company (XYZ), that wants to promote a new offering to young professionals. XYZ hires Adco to develop and launch a targeted advertising campaign. In return for the fees paid to Adco, XYZ hopes to increase sales of its new offering. In 2020, companies spent \$325.6 billion (the ad spending mentioned earlier) to promote their products and services. In return, companies like XYZ realized, in aggregate, \$2.8 trillion in sales (sales impact). This means every dollar of ad spending generated, on average, \$8.6 in incremental sales. That \$2.8 trillion was 7.6% of the \$36.7 trillion of sales activity that occurred in the US during 2020. In other words, advertising directly stimulated 7.6% of US sales in 2020.

To fulfil those sales orders, XYZ must reach out to its suppliers (supplier impact), who, in turn, must reach out to their suppliers (inter-industry impact). The supplier impact, which quantifies the activity supported by first-tier suppliers to the companies that use advertising, amounted to \$911.2 million in sales activity. The inter-industry sales activity that rippled throughout the extended supply chain reached 1.1 trillion in 2020.

The final level of contributions, also known as induced impacts, occur when employees of the direct and supplier companies spend portions of their wages (as consumers) to make purchases (generate sales) of goods and services. In 2020, advertising stimulated just over \$2.0 trillion of induced sales activity in the United States.

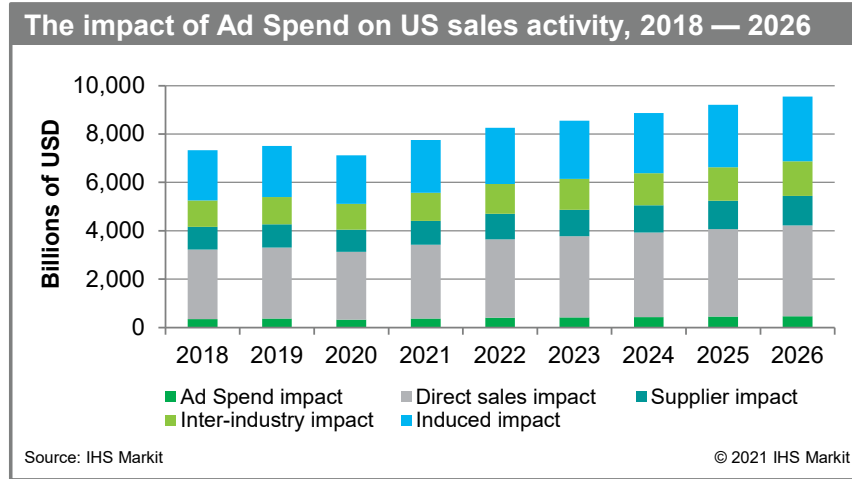
Economic impact was assessed by quantifying how ad spending affects five economic indicators:

- **Sales activity (output).** In the context of an economic contribution analysis, output represents the value of sales that occur in the economies studied that are ultimately attributable to transactions initiated by ad spending.
- **Employment.** In order to produce their goods and services, companies must hire and retain employees. This indicator measures the number of workers required to support a given level of sales activity within an industry or economy.
- **Value added contribution to gross domestic product.** Value added is the difference between the revenue received for a product or service and its non-labor input costs. Gross domestic product (GDP) is the sum of value added across the US economy and is the broadest measures of the health of an economy. The corresponding concept on the state level is known as gross state product (GSP).
- **Labor income.** A subcomponent of value added, labor income captures the compensation paid to workers. A common measure of the relative contribution of an industry to the overall economy is labor income per worker. The higher the ratio, the greater is each worker's quality and contribution to economic growth.
- **Government revenues.** Companies and their employees also pay taxes.

The impacts of advertising on these economic indicators are discussed in the following section.

Sales activity

Businesses spend billions of dollars on advertising to stimulate demand for their products and services. In 2020 alone, an estimated \$325.6 billion was spent on advertising across all industries and media types. In total, the companies that advertised realized incremental sales of \$2.8 trillion. This means that, on average, these companies enjoyed \$8.6 of sales for every dollar they spend on advertising.

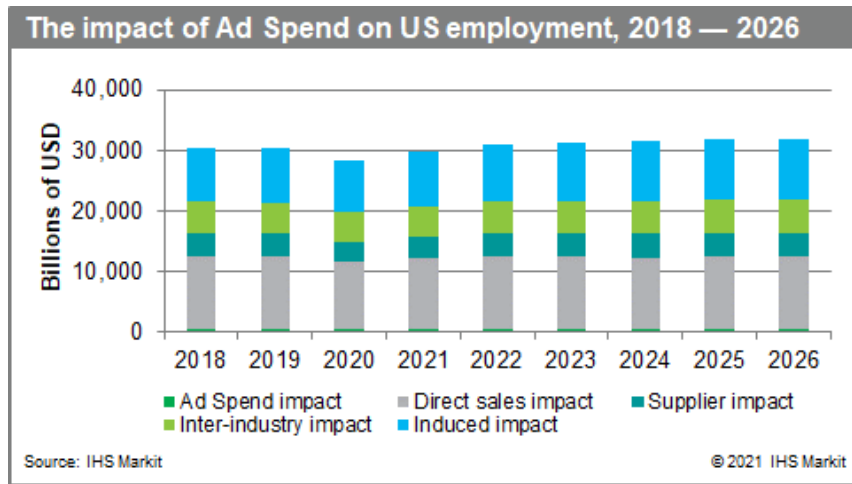


The economic activity generated from the direct sales are “multiplied” throughout the economy as ripples of supplier, inter-industry, and induced sales activity more than double the value of the direct sales impact. The supplier impact in 2020 was \$911.2 billion and the inter-industry impact was almost \$1.1 trillion, for a combined indirect impact of \$2.0 trillion. The corresponding induced impact added another \$2.0 trillion. In total, advertising expenditures plus the associated sales (output) supported by advertising accounted for \$7.1 trillion—19.4% of the \$36.7 trillion of total output in the US economy during 2020. By 2026 this number will reach \$9.6 trillion and account for 19.8% of the expected \$48.3 trillion in total US output. Thus, about one out of every five dollars of sales activity is stimulated by advertising.

Employment

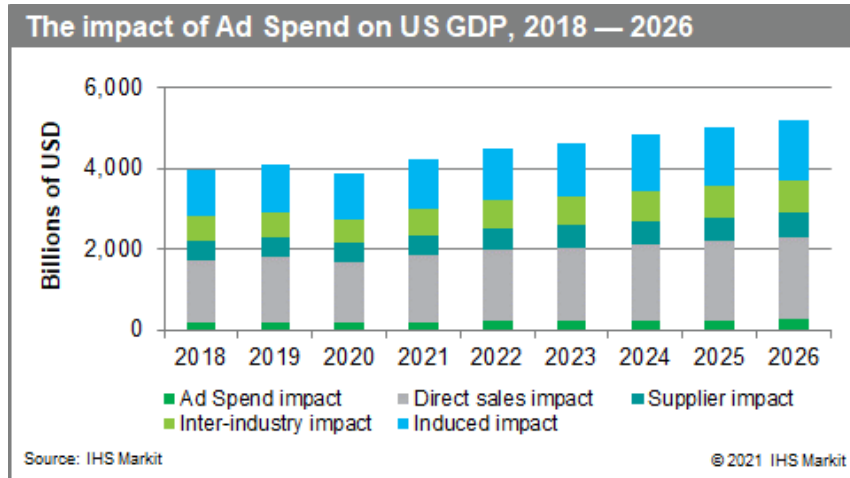
An estimated 145.7 million people were employed in the US during 2020 and about 0.4% of them (551,000) were directly employed in occupations related to advertising and marketing across all industries. These workers focused on developing and executing the advertising messages that reach end users. If effective, advertising stimulates additional economic activity throughout the supply chain, resulting in businesses retaining existing or hiring additional workers to fill new orders.

IHS Markit estimates that the sales attributable to ad spend supported about 28.5 million workers in 2020 – including all levels of employment through the entire supply chain, from manufacturer to wholesaler to retailer – bringing the overall advertising impact on employment to equal 19.5% of the working population. That is to say, every direct job in an advertising-defined occupation (i.e., those employed at advertising firms) supported another 51 jobs across a broad range of industries throughout the economy. In addition, every million dollars spent on advertising supported 83 American jobs.



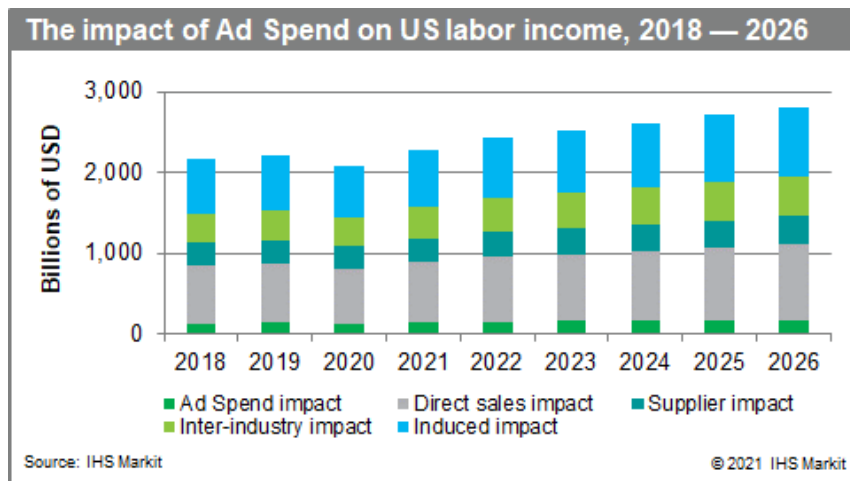
Value Added

Value added is an important measure in the analysis of economic impact. It provides a more accurate indicator of advertising’s contribution to the broader economy as it removes the double-counting that can occur when analyzing sales activity (e.g., when component products are sold and resold at various stages of the supply chain). In general, value added is sales activity (output) less the associated non-labor input costs. The sum of all value added across businesses in an economy is equivalent to gross domestic product (GDP) at the national level and gross state product (GSP) at the state level. IHS Markit estimates that advertising activity ultimately supported \$3.9 trillion (or 18.5%) of the \$20.9 trillion in US GDP in 2020.



Labor Income

Labor income is a measure of overall employee compensation and proprietor income across all jobs and industries in the economy. Advertising supported \$2.1 trillion in these salaries and wages in 2020, representing 18.2% of total labor income in the United States.



An approximation of the wage implication can be derived by finding the ratio between labor income and number of employees. In 2020, the average salary associated with jobs supported by advertising was \$73,300 or 12% higher than the national average. Thus, the sales generated by advertising are for goods and services that require, on average, higher-skilled workers.

Summary of economic impacts stimulated by ad spend

Sales activity (output) (\$B)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Ad Spend impact	351	366	326	371	403	423	436	449	466
Direct sales impact	2,873	2,945	2,805	3,049	3,244	3,358	3,487	3,621	3,756
Supplier impact	936	958	911	991	1,054	1,089	1,130	1,173	1,216
Inter-industry impact	1,098	1,124	1,072	1,165	1,239	1,281	1,330	1,381	1,432
Induced impact	2,071	2,121	2,003	2,177	2,319	2,400	2,491	2,587	2,684
Overall Ad Spend impact	7,329	7,514	7,118	7,754	8,258	8,552	8,875	9,211	9,554
Total US output	36,641	37,914	36,687	38,688	40,961	42,569	44,295	46,252	48,301
Ad Spend impact share of	20.0%	19.8%	19.4%	20.0%	20.2%	20.1%	20.0%	19.9%	19.8%

Employment (thousands of workers)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Ad Spend impact	600	600	551	548	601	625	632	644	654
Direct sales impact	12,008	11,929	11,022	11,604	11,903	11,821	11,735	11,777	11,792
Supplier impact	3,699	3,699	3,440	3,582	3,772	3,820	3,849	3,868	3,863
Inter-industry impact	5,216	5,189	4,808	5,038	5,350	5,455	5,533	5,583	5,580
Induced impact	8,854	8,887	8,658	9,056	9,459	9,647	9,775	9,923	10,039
Overall Ad Spend impact	30,377	30,305	28,480	29,828	31,085	31,367	31,523	31,794	31,928
Total US employment	152,639	154,555	145,724	148,905	154,259	156,668	158,341	159,688	160,575
Ad Spend impact share of	19.9%	19.6%	19.5%	20.0%	20.2%	20.0%	19.9%	19.9%	19.9%

Value added (contribution to GDP) (\$B)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Ad Spend impact	188	196	175	199	216	227	234	241	250
Direct sales impact	1,551	1,593	1,517	1,650	1,755	1,819	1,889	1,962	2,037
Supplier impact	471	482	459	499	531	549	570	591	613
Inter-industry impact	617	631	603	654	696	720	748	776	805
Induced impact	1,147	1,175	1,110	1,207	1,285	1,330	1,380	1,433	1,487
Overall Ad Spend impact	3,975	4,078	3,864	4,208	4,482	4,644	4,821	5,004	5,192
Total US value added (VA)	20,612	21,433	20,937	23,482	25,048	25,876	26,860	27,967	29,105
Ad Spend impact share of	19.3%	19.0%	18.5%	17.9%	17.9%	17.9%	17.9%	17.9%	17.8%

Labor income (\$B)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Ad Spend impact	131	137	122	139	151	158	163	168	174
Direct sales impact	720	739	691	752	802	830	861	895	929
Supplier impact	275	281	268	291	310	320	332	345	358
Inter-industry impact	370	378	362	392	418	432	448	465	483
Induced impact	667	683	645	701	747	773	802	833	864
Overall Ad Spend impact	2,163	2,217	2,087	2,275	2,426	2,513	2,607	2,706	2,807
Total US labor income (LI)	10,950	11,432	11,491	12,487	13,264	13,919	14,538	15,187	15,897
Ad Spend impact share of	19.7%	19.4%	18.2%	18.2%	18.3%	18.1%	17.9%	17.8%	17.7%

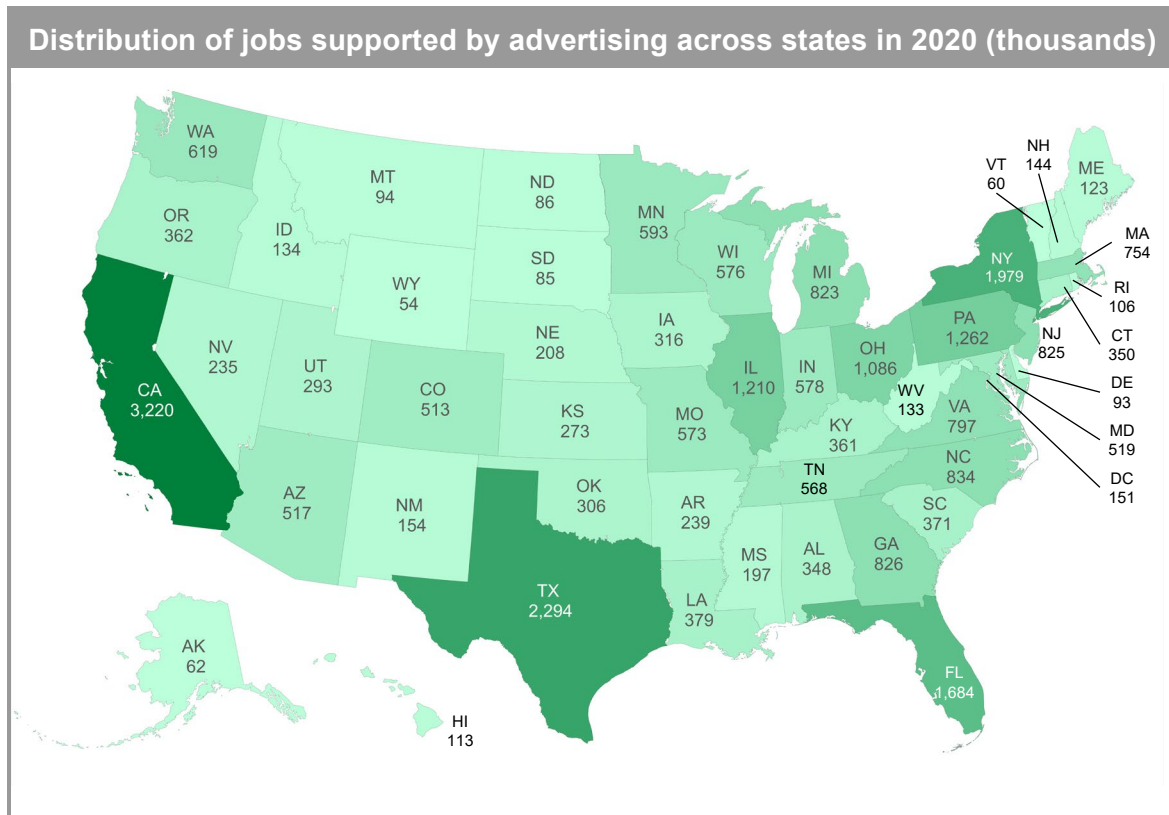
Source: IHS Markit

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Advertising brings economic benefits to all state economies

Many may expect the economic impacts of advertising expenditures to be highly concentrated around advertising hubs such as New York, Los Angeles, or Chicago. Closer to reality, advertising stimulates demand for practically all products and services; meeting that demand requires the participation of virtually all industries and regions of the United States. For example, an advertising campaign conceived in New York that results in a consumer purchasing a tractor from a dealer in Texas may trigger manufacturing activity in Illinois, financial services activity in Arizona, and so on.

The following graphic shows how the 28.5 million jobs supported by advertising in 2020 were distributed across the United States. More detailed results at the state level are included in Appendix A and at the Congressional District level in Appendix B and Appendix C.



Source: IHS Markit

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Potential losses from a reduction in tax deductibility

The second mission of this study was to assess the potential impacts of a change in the tax deductibility of advertising expenses. Under current law, ordinary and necessary business expenses – such as advertising expenditures – are allowed to be deducted from business income before calculating the business income tax liability. On the other hand, business expenses that are viewed as investments that will accrue benefits over a period greater than one year are required to be amortized or depreciated over the life of the benefit.

Proposed tax reforms would potentially reclassify advertising from a current expense to a long-lived capitalized asset subject to amortization. While determining the life of welfare-gain from advertising has been a tricky exercise for policy makers and economists, Nobel Prize winners Kenneth Arrow and George Stigler are of the opinion that, “...existing economic evidence does not support the conclusion that advertising is long-lived.”¹ In other words, Arrow and Stigler’s seminal research supports the position that advertising should continue to be treated as a current expense that is fully-deductible in the year incurred.

In order to estimate the effect of any tax policy change, two key factors need to be considered. The first factor is how sensitive a given industry’s ad spending is to a change in the cost of advertising. The econometric model developed for this study found that every one-percent increase in the cost of advertising leads to an average drop of about 0.84% in ad spending. The second factor is the statutory federal corporate income tax, which currently stands at 21%.

To illustrate, assume legislation was passed whereby 20% of advertising expenditures would no longer be tax deductible. Under this new regime, a company spending \$10 million on advertising would pay federal income tax on \$2 million of that spending. At the 21% rate, this amounts to a \$420,000 tax obligation. Thus, the total cost of the advertising campaign would become \$10.42 million, an increase of 4.2%. In response, the company would decrease ad spending by $4.2 * 0.84 = 3.5\%$.

¹ Arrow, Kenneth J., Stigler, George G., et al. “Economic Analysis of Proposed Changes in the Tax Treatment of Advertising Expenditures,” August 1990. Lexecon, Inc.

In 2020, companies spent \$325.6 billion on advertising. Under the conditions outlined above, advertising expenditures would decrease by \$11.4 billion to \$314.2 billion. Assuming a relatively linear relationship between ad spend and the resultant economic impacts, approximately \$300 billion less sales activity and about 1.2 million jobs would have been at risk in the United States in 2020.

The Congressional Budget Office (CBO) has outlined two potential hybrid tax reform strategies that would reclassify a portion of advertising expenditures as a current expense with the remainder treated as a long-lived capitalized asset subject to amortization². Under both CBO scenarios, 50% of advertising expenditures could be deducted in the current year. The remaining 50% would be capitalized and amortised (providing a tax offset) in the subsequent 5 or 10 years. The following table presents the anticipated impact on the economic contributions presented earlier in this report under the 5-year amortization scenario, assuming it was implemented in 2021.

Changes to Advertising's baseline economic contributions under the CBO's 5-year amortization scenario						
	2021	2022	2023	2024	2025	2026
A. Original Advertising Expenditure Forecast (millions of USD)	371,033	402,603	422,652	436,290	449,439	465,575
B. 50% Deductible in Year 1	185,516	201,301	211,326	218,145	224,720	232,788
C. Amortized Advertising Expenditures	0	33,846	71,167	110,971	152,719	196,399
From 2021		33,846	33,846	33,846	33,846	33,846
From 2022			37,320	37,320	37,320	37,320
From 2023				39,805	39,805	39,805
From 2024					41,747	41,747
From 2025						43,680
D. Current Year Deduction (B + C)	185,516	235,148	282,493	329,116	377,438	429,186
Advertising Expenditures Taxable in Current Year (A - D)	185,516	167,455	140,159	107,174	72,001	36,389
E. Taxes @21% corporate tax rate = Increase in Cost of Advertising	38,958	35,166	29,433	22,506	15,120	7,642
F. Percent Increase in Cost of Advertising (E/A)	10.50%	8.73%	6.96%	5.16%	3.36%	1.64%
G. Percent Decrease in Advertising Expenditures(0.836 * F)	8.78%	7.30%	5.82%	4.31%	2.81%	1.37%
H. Revised Advertising Expenditures (millions of USD)	338,464	373,204	398,046	417,475	436,799	459,187
I. Amount to be Amortized	169,232	186,602	199,023	208,737	218,399	229,594
Amount to be amortized each of the 5 years	33,846	37,320	39,805	41,747	43,680	45,919
Unrealized Economic Impacts relative to untaxed forecast						
Jobs (workers)	2,618,331	2,269,854	1,826,163	1,359,474	894,211	438,109
Sales Activity (millions of USD)	680,604	603,028	497,875	382,730	259,059	131,093
Contribution to GDP (millions of USD)	369,405	327,315	270,376	207,901	140,748	71,247

In 2021, the baseline forecast for advertising expenditures presented earlier in this report, was \$371.0 billion. Under this taxation plan, \$185.5 billion could be deducted in 2021. In theory, the remaining \$185.5 billion would be capitalized and then amortized in 2022

² Congressional Budget Office, "Options for Reducing the Deficit: 2021 to 2030," December 2020.

through 2026. The 2021 taxes due on the capitalized \$185.5 billion would be \$39.0 billion, which has the effect of increasing advertising costs by 10.5%. This, in turn, leads to an 8.8% decrease in advertising expenditures. Thus, the original \$371.0 billion from the baseline forecast drops to \$338.5 billion — \$169.2 billion of which can be deducted in 2021 while \$33.8 billion would be written off from 2022 through 2026. This process of shrinking advertising expenditure levels (relative to the baseline forecast) continues through subsequent years.

The baseline forecast predicted that advertising expenditures of \$371.0 billion would ultimately support 29,828,331 jobs throughout the US economy. Under the 5-year amortization conditions, 2,618,331 of those jobs would not be realized, therein putting about 1% of potential US jobs at risk. This effect diminishes slightly in the following years as the effects of the amortized deductions kick-in. However, even by 2026, the economy is still 438,109 jobs below the baseline forecast. Similar impacts occur to sales activity and GDP contribution.

The impacts are identical for 2021 under the 10-year amortization plan because there are no amortization offsets that year. However, by 2026 the longer amortization period leads to the US economy being 1,640,037 jobs below the baseline forecast. In addition, \$266.7 billion of potential GDP would not be realized. Either amortization plan would dampen the stimulative economic impacts of advertising as advertisers spend at lower levels. This could potentially lead to underperformance of the US economy (relative to the baseline forecast) until at least one full amortization cycle has completed.

Changes to Advertising's baseline economic contributions under the CBO's 10-year amortization scenario						
	2021	2022	2023	2024	2025	2026
A. Original Advertising Expenditure Forecast	371,033	402,603	422,652	436,290	449,439	465,575
B. 50% Deductible in Year 1	185,516	201,301	211,326	218,145	224,720	232,788
C. Amortized Advertising Expenditures	0	16,923	35,435	55,023	75,406	96,567
From 2021		16,923	16,923	16,923	16,923	16,923
From 2022			18,512	18,512	18,512	18,512
From 2023				19,589	19,589	19,589
From 2024					20,383	20,383
From 2025						21,161
D. Current Year Deduction (B + C)	185,516	218,225	246,761	273,169	300,126	329,355
Advertising Expenditures Taxable in Current Year (A - D)	185,516	184,378	175,891	163,122	149,314	136,220
E. Taxes @21% corporate tax rate = Increase in Cost of Advertising	38,958	38,719	36,937	34,256	31,356	28,606
F. Percent Increase in Cost of Advertising (E/A)	10.50%	9.62%	8.74%	7.85%	6.98%	6.14%
G. Percent Decrease in Advertising Expenditures(0.836 * F)	8.78%	8.04%	7.31%	6.56%	5.83%	5.14%
H. Revised Advertising Expenditures	338,464	370,233	391,772	407,653	423,226	441,661
I. Amount to be Amortized	169,232	185,117	195,886	203,826	211,613	220,830
Amount to be amortized each of the 10 years	16,923	18,512	19,589	20,383	21,161	22,083
Unrealized Economic Impacts relative to untaxed forecast						
Jobs (workers)	2,618,331	2,499,248	2,291,722	2,069,160	1,854,392	1,640,037
Sales Activity (millions of USD)	680,604	663,971	624,802	582,526	537,231	490,738
Contribution to GDP (millions of USD)	369,405	360,393	339,305	316,431	291,880	266,708

What do we mean by jobs “at risk”?

Any proposed tax reforms that would limit the deductibility of advertising expenditures will, in effect, increase the relative cost of advertising. Based on our models, this will result in reduced ad spending, all other factors held constant. Cutting back on advertising will lead to lower sales, which means companies will need fewer employees. The difference between the jobs supported under current policy and a tax reform scenario are those deemed “at risk.” Thus, “at risk” is the maximal impact on employment under the tax reform scenario. The actual number of jobs affected will depend on the choices companies make to deal with the higher cost of advertising.

Under a tax reform regime, some companies may elect to not reduce their ad spending in order maintain sales. However, to counter the effects of higher advertising costs, some companies may decide to “do more with less” and keep employment at sub-optimal levels, which could contribute to employee burn out and increase employee turn-over rates.

Alternatively, companies that elect to sustain baseline advertising spending could accept lower profit levels and/or make cuts in other areas such as R&D and capital investment. The former could negatively affect the market capitalization of publicly-traded firms; the latter could have negative consequences on future growth. Thus, any changes to the tax treatment of advertising will force companies to make some potentially painful trade-offs.

Appendix A: Detailed economic impact tables by state

Ad spending impact as share of state employment (jobs), 2020					
State	Employment levels		Leverage: Total jobs per advertising job	Total state employment	Ad spend impact as share of employment
	From ad spend	From stimulated sales			
Alaska	831	61,482	74	316,223	19.7%
Alabama	6,135	342,293	56	2,051,500	17.0%
Arkansas	2,655	236,321	89	1,277,995	18.7%
Arizona	8,725	507,907	58	2,918,755	17.7%
California	75,822	3,144,439	41	16,722,486	19.3%
Colorado	13,088	500,225	38	2,731,838	18.8%
Connecticut	6,025	343,687	57	1,551,820	22.5%
District of Columbia	7,105	143,865	20	2,603,863	5.8%
Delaware	1,598	91,207	57	407,503	22.8%
Florida	32,947	1,650,909	50	8,710,692	19.3%
Georgia	16,303	810,151	50	4,586,171	18.0%
Hawaii	1,514	111,573	74	587,348	19.3%
Iowa	3,217	312,574	97	1,685,851	18.7%
Idaho	2,202	131,450	60	812,117	16.5%
Illinois	25,583	1,183,967	46	5,513,794	21.9%
Indiana	7,038	571,402	81	3,008,206	19.2%
Kansas	4,545	268,359	59	971,969	28.1%
Kentucky	4,651	356,421	77	1,725,133	20.9%
Louisiana	5,364	373,478	70	1,920,872	19.7%
Massachusetts	18,854	735,026	39	3,200,617	23.6%
Maryland	15,330	503,308	33	2,346,652	22.1%
Maine	1,566	121,399	78	611,578	20.1%
Michigan	18,409	804,896	44	4,087,579	20.1%
Minnesota	9,820	582,841	59	2,901,259	20.4%
Missouri	9,516	563,665	59	3,646,197	15.7%
Mississippi	1,913	195,218	102	1,088,601	18.1%
Montana	1,344	92,422	69	507,870	18.5%
North Carolina	14,287	819,561	57	4,511,888	18.5%
North Dakota	1,026	85,325	83	485,428	17.8%
Nebraska	2,746	205,579	75	1,103,112	18.9%
New Hampshire	2,116	142,078	67	640,191	22.5%
New Jersey	18,686	806,231	43	2,908,924	28.4%
New Mexico	3,375	150,921	45	845,132	18.3%
Nevada	3,378	231,312	68	1,313,062	17.9%
New York	41,396	1,937,342	47	9,827,497	20.1%
Ohio	15,999	1,069,648	67	5,528,574	19.6%
Oklahoma	4,286	302,184	71	1,712,037	17.9%
Oregon	5,736	355,863	62	2,089,883	17.3%
Pennsylvania	21,633	1,240,845	57	5,684,519	22.2%
Rhode Island	1,518	104,560	69	686,257	15.5%
South Carolina	5,817	365,040	63	1,982,551	18.7%
South Dakota	801	83,770	105	453,733	18.6%
Tennessee	8,199	559,509	68	3,313,743	17.1%
Texas	45,072	2,249,348	50	12,742,352	18.0%
Utah	5,733	286,861	50	1,578,620	18.5%
Virginia	25,567	771,812	30	2,491,671	32.0%
Vermont	894	59,118	66	298,646	20.1%
Washington	12,199	606,479	50	3,248,149	19.0%
Wisconsin	6,658	569,493	86	2,763,058	20.9%
West Virginia	1,546	131,770	85	726,751	18.3%
Wyoming	554	53,682	97	294,211	18.4%
United States	551,321	27,928,816	51	145,724,478	19.5%

Source: IHS Markit

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Ad spending impact as share of state employment (jobs), 2026

State	Employment levels		Leverage: Total jobs per advertising job	Total state employment	Ad spend impact as share of employment
	From ad spend	From stimulated sales			
Alaska	986	68,177	69	342,225	20.2%
Alabama	7,280	367,697	51	2,185,361	17.2%
Arkansas	3,151	261,757	83	1,352,614	19.6%
Arizona	10,355	553,034	53	3,331,940	16.9%
California	89,981	3,453,554	38	18,696,428	19.0%
Colorado	15,532	553,477	36	3,054,006	18.6%
Connecticut	7,150	376,213	53	1,658,337	23.1%
District of Columbia	8,432	156,366	19	2,954,411	5.6%
Delaware	1,896	100,629	53	450,967	22.7%
Florida	39,099	1,814,979	46	9,835,682	18.9%
Georgia	19,347	883,430	46	5,008,908	18.0%
Hawaii	1,797	122,626	68	662,375	18.8%
Iowa	3,817	338,583	89	1,795,040	19.1%
Idaho	2,613	142,298	54	885,382	16.4%
Illinois	30,361	1,299,172	43	5,988,438	22.2%
Indiana	8,352	620,607	74	3,181,588	19.8%
Kansas	5,394	294,796	55	1,005,306	29.9%
Kentucky	5,519	387,468	70	1,874,980	21.0%
Louisiana	6,365	409,119	64	2,059,546	20.2%
Massachusetts	22,375	804,552	36	3,627,927	22.8%
Maryland	18,192	547,406	30	2,571,997	22.0%
Maine	1,858	131,421	71	652,086	20.4%
Michigan	21,847	876,119	40	4,501,315	19.9%
Minnesota	11,654	647,639	56	3,174,204	20.8%
Missouri	11,293	622,752	55	3,876,195	16.4%
Mississippi	2,271	209,946	92	1,134,052	18.7%
Montana	1,595	100,923	63	536,513	19.1%
North Carolina	16,955	902,302	53	5,008,869	18.4%
North Dakota	1,218	94,237	77	515,220	18.5%
Nebraska	3,259	226,812	70	1,178,270	19.5%
New Hampshire	2,511	152,858	61	700,814	22.2%
New Jersey	22,175	888,378	40	3,238,220	28.1%
New Mexico	4,006	163,911	41	905,719	18.5%
Nevada	4,009	258,528	64	1,541,362	17.0%
New York	49,126	2,115,250	43	10,934,341	19.8%
Ohio	18,986	1,186,968	63	5,969,940	20.2%
Oklahoma	5,086	331,705	65	1,826,970	18.4%
Oregon	6,808	393,935	58	2,285,489	17.5%
Pennsylvania	25,672	1,369,809	53	6,190,165	22.5%
Rhode Island	1,801	116,192	65	754,452	15.6%
South Carolina	6,903	393,852	57	2,163,952	18.5%
South Dakota	951	90,784	96	482,516	19.0%
Tennessee	9,730	611,350	63	3,574,795	17.4%
Texas	53,489	2,460,991	46	14,443,125	17.4%
Utah	6,804	313,235	46	1,783,686	17.9%
Virginia	30,341	847,822	28	2,630,684	33.4%
Vermont	1,061	63,102	59	331,868	19.3%
Washington	14,476	660,535	46	3,629,832	18.6%
Wisconsin	7,901	629,337	80	3,023,891	21.1%
West Virginia	1,835	143,578	78	757,104	19.2%
Wyoming	657	59,576	91	305,749	19.7%
United States	654,273	31,274,063	48	160,574,856	19.9%

Source: IHS Markit

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Ad spending impact as share of state sales activity (output), 2020

State	Sales activity (millions of \$)		Leverage: Total sales ad spend	Total state output	Ad spend impact as share of output
	From ad spend	From stimulated sales			
Alaska	376	14,405	38.35	82,051	18.0%
Alabama	2,577	72,164	28.01	414,638	18.0%
Arkansas	1,072	42,288	39.45	226,992	19.1%
Arizona	3,704	110,912	29.94	666,458	17.2%
California	55,904	935,033	16.73	5,256,877	18.9%
Colorado	7,730	125,867	16.28	718,703	18.6%
Connecticut	4,638	105,596	22.77	456,123	24.2%
District of Columbia	7,357	46,119	6.27	768,677	7.0%
Delaware	1,161	22,664	19.51	100,278	23.8%
Florida	13,957	345,913	24.78	1,917,990	18.8%
Georgia	7,440	192,100	25.82	1,041,422	19.2%
Hawaii	586	21,677	37.01	122,665	18.1%
Iowa	1,329	60,102	45.21	341,965	18.0%
Idaho	852	22,575	26.51	144,278	16.2%
Illinois	14,370	308,565	21.47	1,467,528	22.0%
Indiana	2,674	119,846	44.81	652,403	18.8%
Kansas	1,945	53,790	27.66	183,462	30.4%
Kentucky	1,503	72,314	48.10	354,669	20.8%
Louisiana	2,095	88,416	42.20	477,798	18.9%
Massachusetts	18,020	222,934	12.37	1,057,258	22.8%
Maryland	10,369	125,562	12.11	631,342	21.5%
Maine	717	21,195	29.57	114,598	19.1%
Michigan	9,641	187,179	19.42	955,508	20.6%
Minnesota	6,320	135,281	21.40	672,259	21.1%
Missouri	4,568	116,756	25.56	777,696	15.6%
Mississippi	584	33,918	58.03	181,794	19.0%
Montana	468	15,280	32.62	90,221	17.5%
North Carolina	7,005	176,488	25.19	1,008,295	18.2%
North Dakota	410	16,852	41.15	104,384	16.5%
Nebraska	1,148	38,299	33.37	208,972	18.9%
New Hampshire	1,169	30,877	26.41	150,918	21.2%
New Jersey	13,403	222,068	16.57	807,401	29.2%
New Mexico	2,371	28,640	12.08	164,680	18.8%
Nevada	1,466	46,585	31.77	269,755	17.8%
New York	31,453	621,260	19.75	3,360,088	19.4%
Ohio	7,838	225,898	28.82	1,218,558	19.2%
Oklahoma	1,542	57,971	37.60	323,261	18.4%
Oregon	3,192	75,399	23.62	483,936	16.2%
Pennsylvania	13,365	266,722	19.96	1,307,067	21.4%
Rhode Island	774	21,639	27.95	160,330	14.0%
South Carolina	2,204	72,211	32.77	400,826	18.6%
South Dakota	317	14,062	44.40	78,758	18.3%
Tennessee	3,308	116,237	35.14	676,550	17.7%
Texas	22,481	565,753	25.17	3,317,166	17.7%
Utah	2,252	58,639	26.03	348,064	17.5%
Virginia	16,277	182,270	11.20	582,126	34.1%
Vermont	371	10,581	28.56	56,197	19.5%
Washington	7,480	176,944	23.66	1,003,588	18.4%
Wisconsin	3,091	114,261	36.96	579,354	20.3%
West Virginia	541	22,321	41.24	134,213	17.0%
Wyoming	188	11,499	61.29	66,498	17.6%
United States	325,604	6,791,924	20.86	36,686,636	19.4%

Source: IHS Markit

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Ad spending impact as share of state sales activity (output), 2026

State	Sales activity (millions of \$)		Leverage: Total sales ad spend	Total state output	Ad spend impact as share of output
	From ad spend	From stimulated sales			
Alaska	537	19,364	36.05	116,085	17.1%
Alabama	3,684	96,695	26.24	530,752	18.9%
Arkansas	1,533	56,696	36.99	285,144	20.4%
Arizona	5,297	148,514	28.04	899,104	17.1%
California	79,936	1,249,017	15.63	7,019,012	18.9%
Colorado	11,053	168,326	15.23	942,571	19.0%
Connecticut	6,632	140,683	21.21	574,367	25.6%
District of Columbia	10,520	62,025	5.90	985,379	7.4%
Delaware	1,661	30,298	18.24	133,806	23.9%
Florida	19,957	464,894	23.29	2,571,573	18.9%
Georgia	10,638	256,376	24.10	1,334,698	20.0%
Hawaii	837	29,222	34.90	170,205	17.7%
Iowa	1,901	80,338	42.26	419,534	19.6%
Idaho	1,218	30,308	24.89	181,567	17.4%
Illinois	20,547	412,724	20.09	1,860,363	23.3%
Indiana	3,824	160,828	42.06	850,051	19.4%
Kansas	2,780	71,981	25.89	225,992	33.1%
Kentucky	2,150	96,940	45.09	478,693	20.7%
Louisiana	2,996	118,758	39.64	666,916	18.3%
Massachusetts	25,767	297,934	11.56	1,412,129	22.9%
Maryland	14,826	168,480	11.36	813,480	22.5%
Maine	1,025	28,453	27.76	145,138	20.3%
Michigan	13,785	250,985	18.21	1,258,930	21.0%
Minnesota	9,037	181,018	20.03	861,599	22.1%
Missouri	6,531	156,319	23.93	987,057	16.5%
Mississippi	836	45,507	54.46	232,536	19.9%
Montana	670	20,559	30.69	118,639	17.9%
North Carolina	10,017	236,359	23.60	1,304,791	18.9%
North Dakota	586	22,569	38.54	145,930	15.9%
Nebraska	1,641	51,270	31.24	260,441	20.3%
New Hampshire	1,672	41,295	24.70	192,778	22.3%
New Jersey	19,165	297,058	15.50	1,057,447	29.9%
New Mexico	3,390	38,461	11.35	220,434	19.0%
Nevada	2,096	62,907	30.01	375,006	17.3%
New York	44,974	828,050	18.41	4,420,975	19.7%
Ohio	11,207	302,705	27.01	1,564,792	20.1%
Oklahoma	2,205	77,703	35.24	427,767	18.7%
Oregon	4,564	101,108	22.15	629,350	16.8%
Pennsylvania	19,111	357,366	18.70	1,711,735	22.0%
Rhode Island	1,107	28,950	26.15	208,772	14.4%
South Carolina	3,151	96,804	30.72	527,871	18.9%
South Dakota	453	18,826	41.57	99,354	19.4%
Tennessee	4,729	155,815	32.95	887,026	18.1%
Texas	32,145	756,915	23.55	4,546,340	17.4%
Utah	3,221	78,503	24.37	480,114	17.0%
Virginia	23,275	244,173	10.49	721,987	37.0%
Vermont	530	14,208	26.82	71,876	20.5%
Washington	10,695	235,615	22.03	1,385,601	17.8%
Wisconsin	4,420	152,851	34.58	721,943	21.8%
West Virginia	774	29,949	38.70	177,221	17.3%
Wyoming	268	15,429	57.51	86,626	18.1%
United States	465,575	9,088,132	19.52	48,301,498	19.8%

Source: IHS Markit

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Ad spending impact as share of state value added (GDP), 2020

State	Value added (millions of \$)		Leverage: Total VA ad spend VA	Total state value added	Ad spend impact as share of value added
	From ad spend	From stimulated sales			
Alaska	201	7,448	36.99	50,646	15.1%
Alabama	1,381	36,600	26.50	195,475	19.4%
Arkansas	575	22,207	38.65	114,370	19.9%
Arizona	1,986	60,827	30.63	320,658	19.6%
California	29,968	513,671	17.14	2,722,839	20.0%
Colorado	4,144	70,234	16.95	351,068	21.2%
Connecticut	2,486	58,268	23.43	241,053	25.2%
District of Columbia	3,944	28,646	7.26	122,114	26.7%
Delaware	623	12,777	20.52	61,834	21.7%
Florida	7,482	196,184	26.22	935,674	21.8%
Georgia	3,988	104,391	26.18	533,567	20.3%
Hawaii	314	12,457	39.68	75,863	16.8%
Iowa	713	30,684	43.06	169,530	18.5%
Idaho	457	11,968	26.22	74,081	16.8%
Illinois	7,703	166,265	21.58	742,278	23.4%
Indiana	1,434	58,886	41.08	327,337	18.4%
Kansas	1,042	28,111	26.97	155,308	18.8%
Kentucky	806	35,649	44.23	183,804	19.8%
Louisiana	1,123	43,237	38.49	226,810	19.6%
Massachusetts	9,660	127,345	13.18	500,237	27.4%
Maryland	5,558	72,471	13.04	364,169	21.4%
Maine	384	11,688	30.42	56,364	21.4%
Michigan	5,168	96,509	18.67	446,249	22.8%
Minnesota	3,388	74,063	21.86	328,472	23.6%
Missouri	2,449	63,059	25.75	277,353	23.6%
Mississippi	313	17,111	54.62	99,757	17.5%
Montana	251	8,179	32.57	46,486	18.1%
North Carolina	3,755	94,356	25.13	498,740	19.7%
North Dakota	220	8,672	39.50	52,021	17.1%
Nebraska	615	20,770	33.76	114,957	18.6%
New Hampshire	627	16,900	26.96	73,604	23.8%
New Jersey	7,185	124,778	17.37	534,134	24.7%
New Mexico	1,271	15,934	12.54	95,731	18.0%
Nevada	786	26,457	33.66	146,668	18.6%
New York	16,861	351,998	20.88	1,402,411	26.3%
Ohio	4,202	118,973	28.32	591,120	20.8%
Oklahoma	827	29,452	35.63	185,884	16.3%
Oregon	1,711	40,679	23.77	218,968	19.4%
Pennsylvania	7,165	146,569	20.46	694,195	22.1%
Rhode Island	415	12,146	29.26	51,234	24.5%
South Carolina	1,181	37,189	31.48	206,218	18.6%
South Dakota	170	7,472	44.01	46,762	16.3%
Tennessee	1,773	60,609	34.18	312,437	20.0%
Texas	12,051	292,947	24.31	1,703,074	17.9%
Utah	1,207	32,107	26.59	168,621	19.8%
Virginia	8,726	105,473	12.09	476,950	23.9%
Vermont	199	5,730	28.85	28,196	21.0%
Washington	4,010	95,703	23.87	544,632	18.3%
Wisconsin	1,657	59,038	35.63	294,185	20.6%
West Virginia	290	11,198	38.59	68,353	16.8%
Wyoming	101	5,297	52.66	36,475	14.8%
United States	174,542	3,689,384	21.14	18,268,968	21.2%

Source: IHS Markit

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Ad spending impact as share of state value added (GDP), 2026

State	Value added (millions of \$)		Leverage: Total VA ad spend VA	Total state value added	Ad spend impact as share of value added
	From ad spend	From stimulated sales			
Alaska	288	10,030	34.84	59,887	16.7%
Alabama	1,975	49,096	24.86	230,820	21.3%
Arkansas	822	29,807	36.28	134,876	22.1%
Arizona	2,839	81,548	28.72	397,778	20.5%
California	42,850	687,076	16.03	3,365,805	20.4%
Colorado	5,925	94,062	15.88	431,229	21.8%
Connecticut	3,555	77,703	21.86	285,019	27.3%
District of Columbia	5,639	38,558	6.84	146,381	26.3%
Delaware	890	17,101	19.21	73,546	23.3%
Florida	10,698	264,063	24.68	1,158,786	22.8%
Georgia	5,702	139,489	24.46	648,284	21.5%
Hawaii	449	16,816	37.46	95,889	17.5%
Iowa	1,019	41,048	40.28	200,370	20.5%
Idaho	653	16,088	24.65	89,277	18.0%
Illinois	11,015	222,651	20.21	870,232	25.6%
Indiana	2,050	79,126	38.60	389,527	20.3%
Kansas	1,490	37,658	25.27	182,315	20.7%
Kentucky	1,152	47,844	41.52	215,321	22.2%
Louisiana	1,606	58,162	36.21	273,522	21.3%
Massachusetts	13,812	170,412	12.34	608,975	28.0%
Maryland	7,948	97,370	12.25	433,964	22.4%
Maine	549	15,708	28.59	65,315	24.1%
Michigan	7,390	129,571	17.53	528,407	24.5%
Minnesota	4,844	99,218	20.48	397,654	25.0%
Missouri	3,501	84,527	24.14	327,186	25.8%
Mississippi	448	22,986	51.31	114,846	20.0%
Montana	359	11,024	30.70	55,490	19.9%
North Carolina	5,370	126,511	23.56	598,439	21.1%
North Dakota	314	11,629	37.04	62,275	18.7%
Nebraska	880	27,836	31.64	135,856	20.5%
New Hampshire	896	22,628	25.25	88,100	25.7%
New Jersey	10,273	167,136	16.27	630,932	26.5%
New Mexico	1,817	21,426	11.79	117,251	18.3%
Nevada	1,124	35,780	31.84	195,442	18.3%
New York	24,109	469,722	19.48	1,716,053	27.4%
Ohio	6,008	159,609	26.57	695,946	22.9%
Oklahoma	1,182	39,526	33.44	220,217	17.9%
Oregon	2,447	54,614	22.32	266,923	20.5%
Pennsylvania	10,244	196,620	19.19	831,037	23.7%
Rhode Island	593	16,268	27.41	59,823	27.2%
South Carolina	1,689	49,914	29.55	250,021	20.0%
South Dakota	243	10,015	41.25	55,199	18.1%
Tennessee	2,535	81,347	32.09	383,897	21.2%
Texas	17,232	392,377	22.77	2,128,514	18.4%
Utah	1,726	43,034	24.93	207,982	20.7%
Virginia	12,477	141,474	11.34	566,824	25.0%
Vermont	284	7,704	27.13	33,644	22.9%
Washington	5,733	127,579	22.25	665,879	19.2%
Wisconsin	2,369	79,053	33.36	349,265	22.6%
West Virginia	415	15,047	36.27	77,973	19.3%
Wyoming	144	7,117	49.48	45,694	15.6%
United States	249,574	4,942,709	19.80	22,163,886	23.4%

Source: IHS Markit

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Ad spending impact as share of state labor income, 2020

State	Labor income (millions of \$)		Leverage: Total LI ad spend LI	Total state labor income	Ad spend impact as share of labor income
	From ad spend	From stimulated sales			
Alaska	184	4,013	21.87	18,452	22.7%
Alabama	1,355	23,232	17.14	109,489	22.5%
Arkansas	587	16,346	27.86	65,611	25.8%
Arizona	1,928	36,725	19.05	163,762	23.6%
California	16,753	230,527	13.76	1,060,256	23.3%
Colorado	2,892	36,423	12.60	163,598	24.0%
Connecticut	1,331	24,701	18.56	102,457	25.4%
District of Columbia	1,570	9,082	5.79	62,532	17.0%
Delaware	353	6,714	19.02	25,079	28.2%
Florida	7,279	116,796	16.04	453,349	27.4%
Georgia	3,602	59,743	16.59	264,757	23.9%
Hawaii	335	7,950	23.76	27,817	29.8%
Iowa	711	21,427	30.15	80,464	27.5%
Idaho	486	8,527	17.53	37,172	24.2%
Illinois	5,652	83,557	14.78	363,453	24.5%
Indiana	1,555	39,214	25.22	164,620	24.8%
Kansas	1,004	18,686	18.61	76,264	25.8%
Kentucky	1,028	24,119	23.47	99,774	25.2%
Louisiana	1,185	24,530	20.70	103,994	24.7%
Massachusetts	4,166	51,429	12.35	231,235	24.0%
Maryland	3,387	33,905	10.01	157,805	23.6%
Maine	346	7,996	23.11	29,453	28.3%
Michigan	4,067	54,983	13.52	236,157	25.0%
Minnesota	2,170	41,595	19.17	163,871	26.7%
Missouri	2,103	40,033	19.04	158,758	26.5%
Mississippi	423	13,215	31.26	55,507	24.6%
Montana	297	5,820	19.60	22,502	27.2%
North Carolina	3,157	58,685	18.59	259,634	23.8%
North Dakota	227	5,449	24.03	23,666	24.0%
Nebraska	607	14,650	24.15	54,160	28.2%
New Hampshire	468	9,437	20.18	35,002	28.3%
New Jersey	4,129	57,210	13.86	221,473	27.7%
New Mexico	746	9,339	12.52	41,959	24.0%
Nevada	746	16,436	22.02	68,333	25.1%
New York	9,146	142,124	15.54	563,564	26.8%
Ohio	3,535	75,998	21.50	309,929	25.7%
Oklahoma	947	19,652	20.75	86,580	23.8%
Oregon	1,267	25,612	20.21	100,686	26.7%
Pennsylvania	4,780	84,344	17.65	326,767	27.3%
Rhode Island	335	7,388	22.03	25,462	30.3%
South Carolina	1,285	25,409	19.77	108,255	24.7%
South Dakota	177	5,616	31.73	22,246	26.0%
Tennessee	1,812	39,473	21.79	167,145	24.7%
Texas	9,958	153,671	15.43	735,517	22.2%
Utah	1,267	20,357	16.07	82,916	26.1%
Virginia	5,649	51,916	9.19	238,619	24.1%
Vermont	198	3,743	18.94	13,839	28.5%
Washington	2,695	45,217	16.78	219,378	21.8%
Wisconsin	1,471	40,683	27.66	152,894	27.6%
West Virginia	342	8,364	24.49	33,526	26.0%
Wyoming	122	3,134	25.61	14,025	23.2%
United States	121,811	1,965,193	16.13	8,403,766	24.8%

Source: IHS Markit

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Ad spending impact as share of state labor income, 2026

State	Labor income (millions of \$)		Leverage: Total LI ad spend LI	Total state labor income	Ad spend impact as share of labor income
	From ad spend	From stimulated sales			
Alaska	262	5,393	20.55	21,898	24.6%
Alabama	1,938	31,155	16.08	131,165	23.8%
Arkansas	839	21,935	26.15	78,512	27.9%
Arizona	2,757	49,187	17.84	210,551	23.4%
California	23,954	308,225	12.87	1,327,085	23.2%
Colorado	4,135	48,742	11.79	204,522	23.8%
Connecticut	1,903	33,050	17.36	122,067	27.1%
District of Columbia	2,245	12,129	5.40	76,721	15.8%
Delaware	505	9,012	17.85	30,680	29.4%
Florida	10,409	157,248	15.11	578,995	27.2%
Georgia	5,150	79,812	15.50	330,555	24.1%
Hawaii	478	10,699	22.37	35,845	29.8%
Iowa	1,016	28,689	28.23	96,722	29.7%
Idaho	696	11,447	16.46	46,657	24.5%
Illinois	8,082	111,985	13.86	438,904	25.5%
Indiana	2,223	52,704	23.70	200,617	26.3%
Kansas	1,436	25,026	17.43	90,505	27.7%
Kentucky	1,469	32,376	22.03	121,844	26.6%
Louisiana	1,694	32,972	19.46	125,462	26.3%
Massachusetts	5,957	68,775	11.55	287,245	23.9%
Maryland	4,843	45,552	9.41	191,198	23.8%
Maine	495	10,736	21.70	34,638	31.0%
Michigan	5,816	73,743	12.68	292,375	25.2%
Minnesota	3,102	55,713	17.96	203,444	27.4%
Missouri	3,006	53,629	17.84	187,722	28.6%
Mississippi	604	17,746	29.36	64,649	27.5%
Montana	425	7,845	18.48	27,208	28.8%
North Carolina	4,514	78,665	17.43	323,698	24.3%
North Dakota	324	7,296	22.50	28,749	25.4%
Nebraska	867	19,609	22.60	65,288	30.0%
New Hampshire	669	12,649	18.92	42,089	30.1%
New Jersey	5,903	76,706	12.99	267,024	28.7%
New Mexico	1,066	12,520	11.74	51,144	24.5%
Nevada	1,067	22,172	20.77	94,092	23.6%
New York	13,078	189,901	14.52	687,977	27.6%
Ohio	5,054	101,967	20.17	372,633	27.4%
Oklahoma	1,354	26,345	19.46	105,121	25.1%
Oregon	1,812	34,331	18.94	124,945	27.5%
Pennsylvania	6,834	113,248	16.57	400,962	28.2%
Rhode Island	480	9,904	20.65	30,690	32.3%
South Carolina	1,838	34,106	18.56	133,382	25.6%
South Dakota	253	7,526	29.74	26,360	28.6%
Tennessee	2,590	52,946	20.44	206,400	25.7%
Texas	14,239	205,726	14.45	950,016	21.7%
Utah	1,811	27,222	15.03	106,426	25.6%
Virginia	8,077	69,594	8.62	290,274	24.0%
Vermont	283	5,023	17.78	16,932	29.7%
Washington	3,854	60,313	15.65	272,901	22.1%
Wisconsin	2,103	54,501	25.91	185,975	29.3%
West Virginia	488	11,221	22.97	39,716	28.3%
Wyoming	175	4,207	24.04	17,310	24.3%
United States	174,175	2,633,222	15.12	10,397,893	27.0%

Source: IHS Markit

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Appendix B: Topline economic impact by congressional district (sorted alphabetically)

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
US Total		28,494,277	31,942,518	7,131,668	9,567,889
Alaska	AK - 00	62,312	70,148	14,781	19,901
Alabama	AL - 01	39,099	42,895	7,480	11,264
Alabama	AL - 02	47,582	52,201	10,475	13,708
Alabama	AL - 03	44,277	48,576	9,169	12,756
Alabama	AL - 04	42,602	46,738	9,567	12,273
Alabama	AL - 05	44,201	48,493	9,393	12,734
Alabama	AL - 06	56,185	61,640	11,353	16,186
Alabama	AL - 07	74,484	81,715	17,304	21,458
Arkansas	AR - 01	48,336	54,218	8,745	11,777
Arkansas	AR - 02	64,857	72,750	11,327	15,803
Arkansas	AR - 03	66,252	74,315	11,944	16,143
Arkansas	AR - 04	59,531	66,776	11,343	14,505
Arizona	AZ - 01	39,988	44,408	8,207	11,905
Arizona	AZ - 02	43,084	47,847	9,440	12,827
Arizona	AZ - 03	46,904	52,089	10,501	13,964
Arizona	AZ - 04	35,304	39,206	7,583	10,511
Arizona	AZ - 05	37,555	41,706	8,150	11,181
Arizona	AZ - 06	76,373	84,816	17,832	22,738
Arizona	AZ - 07	96,831	107,536	21,567	28,829
Arizona	AZ - 08	32,300	35,870	6,223	9,616
Arizona	AZ - 09	108,293	120,265	25,113	32,241
California	CA - 01	41,809	47,174	10,639	17,254
California	CA - 02	48,974	55,258	13,643	20,211
California	CA - 03	53,415	60,270	15,463	22,044
California	CA - 04	46,812	52,819	12,497	19,318
California	CA - 05	50,570	57,059	16,893	20,869
California	CA - 06	60,430	68,185	15,536	24,939
California	CA - 07	44,564	50,283	12,107	18,391
California	CA - 08	36,678	41,385	9,388	15,137
California	CA - 09	36,954	41,696	9,907	15,250
California	CA - 10	38,690	43,655	14,788	15,967
California	CA - 11	53,653	60,538	19,226	22,142
California	CA - 12	89,592	101,089	28,451	36,973
California	CA - 13	50,035	56,456	14,698	20,649
California	CA - 14	56,114	63,315	21,166	23,157
California	CA - 15	59,664	67,321	24,429	24,623
California	CA - 16	48,456	54,674	13,347	19,997
California	CA - 17	87,382	98,595	31,511	36,061
California	CA - 18	90,749	102,394	30,352	37,451
California	CA - 19	66,201	74,697	23,195	27,320
California	CA - 20	38,956	43,955	10,083	16,076
California	CA - 21	54,383	61,362	15,212	22,443
California	CA - 22	49,109	55,411	13,120	20,266
California	CA - 23	48,084	54,255	13,380	19,844
California	CA - 24	47,378	53,458	13,382	19,552
California	CA - 25	38,251	43,160	11,231	15,786
California	CA - 26	43,236	48,785	12,977	17,843
California	CA - 27	73,753	83,218	20,252	30,437
California	CA - 28	80,353	90,665	26,602	33,161
California	CA - 29	43,371	48,936	13,115	17,898
California	CA - 30	76,151	85,924	25,157	31,426
California	CA - 31	46,387	52,340	12,178	19,143
California	CA - 32	52,596	59,346	15,680	21,706
California	CA - 33	132,263	149,237	46,775	54,583

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
California	CA - 34	85,939	96,968	23,597	35,466
California	CA - 35	68,123	76,866	19,693	28,113
California	CA - 36	34,551	38,985	8,128	14,259
California	CA - 37	90,272	101,857	28,197	37,254
California	CA - 38	61,969	69,921	18,175	25,573
California	CA - 39	69,660	78,600	20,819	28,748
California	CA - 40	62,286	70,280	17,109	25,705
California	CA - 41	52,061	58,742	14,364	21,485
California	CA - 42	43,067	48,594	11,875	17,773
California	CA - 43	65,070	73,420	21,056	26,853
California	CA - 44	52,334	59,050	19,299	21,598
California	CA - 45	72,990	82,356	24,515	30,122
California	CA - 46	88,938	100,352	26,133	36,703
California	CA - 47	71,786	80,998	24,794	29,625
California	CA - 48	71,275	80,421	21,575	29,414
California	CA - 49	66,553	75,094	23,361	27,465
California	CA - 50	47,886	54,031	13,427	19,762
California	CA - 51	50,838	57,362	13,609	20,980
California	CA - 52	101,840	114,909	33,586	42,028
California	CA - 53	77,811	87,796	21,242	32,111
Colorado	CO - 01	116,978	133,210	31,680	40,879
Colorado	CO - 02	77,228	87,944	20,947	26,988
Colorado	CO - 03	46,453	52,899	10,390	16,233
Colorado	CO - 04	74,535	84,878	18,936	26,047
Colorado	CO - 05	44,457	50,626	10,217	15,536
Colorado	CO - 06	83,252	94,804	22,323	29,093
Colorado	CO - 07	70,410	80,180	19,104	24,605
Connecticut	CT - 01	89,911	100,401	30,268	37,875
Connecticut	CT - 02	47,438	52,973	12,484	19,983
Connecticut	CT - 03	73,038	81,560	22,640	30,767
Connecticut	CT - 04	67,721	75,622	23,200	28,527
Connecticut	CT - 05	71,604	79,958	21,642	30,163
District of Columbia	DC - 00	150,970	173,229	53,477	72,545
Delaware	DE - 00	92,805	104,421	23,825	31,958
Florida	FL - 01	39,845	44,798	8,449	11,473
Florida	FL - 02	42,064	47,294	8,136	12,112
Florida	FL - 03	42,355	47,621	8,294	12,196
Florida	FL - 04	64,891	72,958	14,636	18,685
Florida	FL - 05	125,088	140,637	27,266	36,018
Florida	FL - 06	39,909	44,870	7,809	11,491
Florida	FL - 07	63,637	71,547	13,867	18,324
Florida	FL - 08	38,437	43,215	7,842	11,067
Florida	FL - 09	72,162	81,133	15,323	20,778
Florida	FL - 10	100,393	112,872	20,993	28,907
Florida	FL - 11	34,768	39,090	6,654	10,011
Florida	FL - 12	42,214	47,462	8,656	12,155
Florida	FL - 13	52,343	58,850	11,051	15,072
Florida	FL - 14	94,458	106,200	21,749	27,198
Florida	FL - 15	55,523	62,425	12,364	15,987
Florida	FL - 16	43,785	49,228	8,221	12,608
Florida	FL - 17	42,444	47,720	8,567	12,221
Florida	FL - 18	48,532	54,565	10,065	13,974
Florida	FL - 19	51,408	57,799	10,128	14,803
Florida	FL - 20	96,676	108,693	20,744	27,837
Florida	FL - 21	48,889	54,967	10,452	14,077

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Florida	FL - 22	106,627	119,882	23,720	30,702
Florida	FL - 23	73,127	82,217	16,257	21,056
Florida	FL - 24	73,827	83,005	16,619	21,258
Florida	FL - 25	70,241	78,973	16,367	20,225
Florida	FL - 26	37,329	41,969	6,836	10,748
Florida	FL - 27	82,883	93,186	18,805	23,865
Georgia	GA - 01	37,654	42,013	8,760	12,166
Georgia	GA - 02	47,208	52,673	10,808	15,252
Georgia	GA - 03	44,601	49,764	10,641	14,410
Georgia	GA - 04	44,363	49,498	10,095	14,333
Georgia	GA - 05	109,532	122,212	28,181	35,388
Georgia	GA - 06	108,962	121,575	30,034	35,204
Georgia	GA - 07	65,887	73,514	16,862	21,287
Georgia	GA - 08	44,218	49,337	10,179	14,286
Georgia	GA - 09	48,068	53,633	10,817	15,530
Georgia	GA - 10	52,392	58,457	11,015	16,927
Georgia	GA - 11	87,982	98,167	22,155	28,426
Georgia	GA - 12	38,396	42,841	8,735	12,405
Georgia	GA - 13	60,286	67,265	12,997	19,478
Georgia	GA - 14	36,903	41,175	8,261	11,923
Hawaii	HI - 01	68,771	76,757	14,213	18,280
Hawaii	HI - 02	44,316	49,463	8,051	11,780
Iowa	IA - 01	78,723	86,308	15,805	20,501
Iowa	IA - 02	79,324	86,967	14,888	20,658
Iowa	IA - 03	79,003	86,615	15,683	20,574
Iowa	IA - 04	78,741	86,328	15,055	20,506
Idaho	ID - 01	59,593	65,778	10,037	14,057
Idaho	ID - 02	74,059	81,746	13,390	17,469
Illinois	IL - 01	49,422	55,565	11,596	17,703
Illinois	IL - 02	39,317	44,204	11,438	14,084
Illinois	IL - 03	63,305	71,173	17,106	22,676
Illinois	IL - 04	51,319	57,698	12,704	18,383
Illinois	IL - 05	97,425	109,534	25,017	34,898
Illinois	IL - 06	91,502	102,875	24,498	32,777
Illinois	IL - 07	137,651	154,760	38,988	49,308
Illinois	IL - 08	107,863	121,270	29,689	38,638
Illinois	IL - 09	80,766	90,805	20,698	28,931
Illinois	IL - 10	69,818	78,496	19,462	25,009
Illinois	IL - 11	63,480	71,370	17,401	22,739
Illinois	IL - 12	38,707	43,518	10,457	13,865
Illinois	IL - 13	56,504	63,528	15,683	20,240
Illinois	IL - 14	70,408	79,159	17,985	25,221
Illinois	IL - 15	41,755	46,945	11,179	14,957
Illinois	IL - 16	46,917	52,749	13,187	16,806
Illinois	IL - 17	49,894	56,096	12,386	17,873
Illinois	IL - 18	53,498	60,147	13,463	19,163
Indiana	IN - 01	44,460	48,984	10,261	12,655
Indiana	IN - 02	65,492	72,158	14,588	18,642
Indiana	IN - 03	60,140	66,260	13,647	17,119
Indiana	IN - 04	61,754	68,039	13,312	17,578
Indiana	IN - 05	83,333	91,814	16,089	23,720
Indiana	IN - 06	58,565	64,525	12,328	16,670
Indiana	IN - 07	84,927	93,570	17,416	24,174
Indiana	IN - 08	59,339	65,379	13,211	16,891

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Indiana	IN - 09	60,431	66,581	11,667	17,202
Kansas	KS - 01	72,003	80,625	14,515	19,725
Kansas	KS - 02	60,646	67,908	11,942	16,614
Kansas	KS - 03	76,839	86,041	16,110	21,050
Kansas	KS - 04	63,416	71,010	13,167	17,373
Kentucky	KY - 01	55,892	61,687	11,363	15,339
Kentucky	KY - 02	63,624	70,220	13,053	17,460
Kentucky	KY - 03	72,458	79,970	16,310	19,885
Kentucky	KY - 04	68,495	75,596	13,395	18,797
Kentucky	KY - 05	38,150	42,105	6,596	10,470
Kentucky	KY - 06	62,454	68,929	13,100	17,139
Louisiana	LA - 01	67,925	75,636	15,594	21,830
Louisiana	LA - 02	91,925	102,361	23,924	29,543
Louisiana	LA - 03	53,183	59,220	14,543	17,092
Louisiana	LA - 04	46,775	52,085	9,549	15,033
Louisiana	LA - 05	47,248	52,612	9,026	15,185
Louisiana	LA - 06	71,785	79,935	17,874	23,071
Massachusetts	MA - 01	50,132	56,478	13,415	21,526
Massachusetts	MA - 02	62,168	70,037	17,546	26,694
Massachusetts	MA - 03	57,962	65,299	18,512	24,888
Massachusetts	MA - 04	91,380	102,946	29,339	39,237
Massachusetts	MA - 05	106,586	120,077	39,028	45,766
Massachusetts	MA - 06	84,625	95,337	28,175	36,336
Massachusetts	MA - 07	129,674	146,087	43,170	55,679
Massachusetts	MA - 08	117,748	132,651	37,912	50,558
Massachusetts	MA - 09	53,605	60,389	13,858	23,017
Maryland	MD - 01	46,295	52,110	11,220	16,362
Maryland	MD - 02	76,031	85,582	20,483	26,872
Maryland	MD - 03	106,372	119,735	26,843	37,596
Maryland	MD - 04	53,265	59,956	13,430	18,826
Maryland	MD - 05	40,560	45,655	10,803	14,335
Maryland	MD - 06	51,351	57,802	14,419	18,150
Maryland	MD - 07	80,019	90,071	20,012	28,282
Maryland	MD - 08	64,744	72,878	18,720	22,883
Maine	ME - 01	67,180	73,830	11,809	16,105
Maine	ME - 02	55,785	61,308	10,104	13,373
Michigan	MI - 01	36,576	40,864	7,263	11,763
Michigan	MI - 02	72,917	81,465	16,867	23,450
Michigan	MI - 03	65,165	72,804	15,157	20,957
Michigan	MI - 04	45,968	51,357	10,482	14,783
Michigan	MI - 05	37,515	41,913	8,060	12,065
Michigan	MI - 06	46,592	52,054	11,594	14,984
Michigan	MI - 07	58,361	65,203	14,011	18,769
Michigan	MI - 08	59,156	66,090	13,144	19,024
Michigan	MI - 09	79,874	89,236	20,562	25,687
Michigan	MI - 10	40,439	45,180	9,843	13,005
Michigan	MI - 11	87,631	97,903	21,062	28,182
Michigan	MI - 12	57,674	64,435	13,764	18,548
Michigan	MI - 13	56,536	63,163	13,098	18,182
Michigan	MI - 14	78,898	88,146	21,912	25,373
Minnesota	MN - 01	62,507	70,764	14,315	20,045
Minnesota	MN - 02	53,511	60,579	13,402	17,160
Minnesota	MN - 03	100,033	113,246	25,796	32,079
Minnesota	MN - 04	81,992	92,823	18,830	26,293
Minnesota	MN - 05	112,875	127,784	29,045	36,197

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Minnesota	MN - 06	70,132	79,396	16,202	22,490
Minnesota	MN - 07	58,730	66,488	12,773	18,834
Minnesota	MN - 08	52,881	59,866	11,238	16,958
Missouri	MO - 01	101,150	113,884	22,113	28,738
Missouri	MO - 02	100,755	113,439	21,437	28,626
Missouri	MO - 03	75,958	85,521	15,544	21,581
Missouri	MO - 04	52,434	59,035	9,576	14,897
Missouri	MO - 05	76,681	86,334	18,248	21,786
Missouri	MO - 06	64,999	73,182	14,904	18,467
Missouri	MO - 07	56,207	63,283	11,082	15,969
Missouri	MO - 08	44,997	50,661	8,420	12,784
Mississippi	MS - 01	44,242	48,138	7,154	10,401
Mississippi	MS - 02	49,033	53,350	9,013	11,527
Mississippi	MS - 03	61,607	67,031	10,988	14,483
Mississippi	MS - 04	42,249	45,969	7,347	9,932
Montana	MT - 00	93,766	104,113	15,748	21,229
North Carolina	NC - 01	68,116	76,477	16,119	20,126
North Carolina	NC - 02	60,282	67,682	12,784	17,811
North Carolina	NC - 03	45,317	50,880	9,546	13,390
North Carolina	NC - 04	95,444	107,161	20,441	28,201
North Carolina	NC - 05	57,337	64,375	12,502	16,941
North Carolina	NC - 06	61,538	69,093	13,936	18,183
North Carolina	NC - 07	50,738	56,967	10,647	14,992
North Carolina	NC - 08	47,542	53,378	9,463	14,047
North Carolina	NC - 09	77,146	86,617	17,852	22,794
North Carolina	NC - 10	42,032	47,191	8,597	12,419
North Carolina	NC - 11	39,850	44,742	7,807	11,774
North Carolina	NC - 12	113,245	127,147	26,255	33,460
North Carolina	NC - 13	75,262	84,501	17,544	22,238
North Dakota	ND - 00	86,352	96,674	17,262	23,154
Nebraska	NE - 01	67,585	75,697	12,954	17,165
Nebraska	NE - 02	73,388	82,196	14,169	18,639
Nebraska	NE - 03	67,352	75,436	12,324	17,106
New Hampshire	NH - 01	72,871	79,788	16,513	21,714
New Hampshire	NH - 02	71,323	78,093	15,534	21,253
New Jersey	NJ - 01	47,250	53,426	12,093	18,113
New Jersey	NJ - 02	48,297	54,609	11,625	18,514
New Jersey	NJ - 03	57,469	64,980	15,219	22,030
New Jersey	NJ - 04	64,542	72,978	16,765	24,742
New Jersey	NJ - 05	60,362	68,250	15,917	23,139
New Jersey	NJ - 06	83,475	94,385	24,056	31,999
New Jersey	NJ - 07	86,032	97,276	27,153	32,980
New Jersey	NJ - 08	72,702	82,204	22,604	27,870
New Jersey	NJ - 09	66,400	75,078	19,160	25,454
New Jersey	NJ - 10	70,440	79,647	20,758	27,003
New Jersey	NJ - 11	74,850	84,633	22,415	28,693
New Jersey	NJ - 12	93,097	105,264	27,704	35,688
New Mexico	NM - 01	60,316	67,207	11,896	16,360
New Mexico	NM - 02	49,048	54,651	9,671	13,304
New Mexico	NM - 03	44,932	50,065	9,444	12,187
Nevada	NV - 01	99,479	112,982	19,638	27,553
Nevada	NV - 02	47,991	54,505	10,263	13,292
Nevada	NV - 03	54,627	62,042	11,189	15,130
Nevada	NV - 04	32,594	37,018	6,960	9,028
New York	NY - 01	59,463	66,518	18,010	26,235

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
New York	NY - 02	66,397	74,274	20,865	29,294
New York	NY - 03	94,344	105,538	30,903	41,625
New York	NY - 04	61,689	69,008	18,206	27,217
New York	NY - 05	41,357	46,263	10,532	18,247
New York	NY - 06	45,950	51,402	13,962	20,273
New York	NY - 07	109,032	121,968	34,310	48,105
New York	NY - 08	56,937	63,693	15,764	25,121
New York	NY - 09	38,119	42,641	10,704	16,818
New York	NY - 10	249,243	278,814	97,892	109,966
New York	NY - 11	40,985	45,848	11,272	18,083
New York	NY - 12	297,285	332,556	128,185	131,163
New York	NY - 13	43,750	48,940	11,660	19,303
New York	NY - 14	64,602	72,267	21,176	28,503
New York	NY - 15	27,649	30,929	8,289	12,199
New York	NY - 16	41,892	46,863	12,218	18,483
New York	NY - 17	58,337	65,258	18,976	25,738
New York	NY - 18	51,511	57,622	14,157	22,727
New York	NY - 19	54,715	61,206	14,173	24,140
New York	NY - 20	68,333	76,440	21,951	30,149
New York	NY - 21	48,016	53,713	12,622	21,185
New York	NY - 22	48,851	54,647	13,563	21,553
New York	NY - 23	56,473	63,173	15,002	24,916
New York	NY - 24	61,791	69,122	18,769	27,262
New York	NY - 25	61,349	68,628	18,485	27,067
New York	NY - 26	66,240	74,099	21,769	29,225
New York	NY - 27	64,429	72,073	19,300	28,426
Ohio	OH - 01	85,169	96,097	18,468	24,626
Ohio	OH - 02	69,464	78,377	14,997	20,085
Ohio	OH - 03	85,653	96,642	17,796	24,766
Ohio	OH - 04	69,608	78,539	17,225	20,127
Ohio	OH - 05	54,157	61,105	11,163	15,659
Ohio	OH - 06	42,945	48,455	8,713	12,417
Ohio	OH - 07	68,589	77,389	14,398	19,832
Ohio	OH - 08	58,935	66,497	12,732	17,041
Ohio	OH - 09	50,162	56,598	11,301	14,504
Ohio	OH - 10	49,223	55,538	10,020	14,233
Ohio	OH - 11	94,384	106,494	20,050	27,291
Ohio	OH - 12	74,296	83,829	16,658	21,483
Ohio	OH - 13	56,742	64,023	11,858	16,407
Ohio	OH - 14	65,762	74,200	15,306	19,015
Ohio	OH - 15	91,099	102,787	19,210	26,341
Ohio	OH - 16	69,460	78,372	13,841	20,084
Oklahoma	OK - 01	66,951	74,686	13,824	17,456
Oklahoma	OK - 02	48,135	53,696	8,217	12,550
Oklahoma	OK - 03	59,509	66,385	11,970	15,516
Oklahoma	OK - 04	52,812	58,913	10,133	13,770
Oklahoma	OK - 05	79,064	88,198	15,369	20,615
Oregon	OR - 01	79,973	90,136	18,234	23,371
Oregon	OR - 02	53,392	60,177	11,366	15,603
Oregon	OR - 03	94,240	106,215	20,867	27,540
Oregon	OR - 04	55,222	62,240	11,672	16,138
Oregon	OR - 05	78,772	88,782	16,452	23,020
Pennsylvania	PA - 01	81,134	91,331	18,184	24,195
Pennsylvania	PA - 02	89,009	100,196	19,139	26,543
Pennsylvania	PA - 03	52,351	58,931	11,343	15,611

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Pennsylvania	PA - 04	64,156	72,220	13,536	19,132
Pennsylvania	PA - 05	48,632	54,744	10,523	14,502
Pennsylvania	PA - 06	89,227	100,442	22,190	26,608
Pennsylvania	PA - 07	119,729	134,778	28,852	35,704
Pennsylvania	PA - 08	55,753	62,760	12,623	16,626
Pennsylvania	PA - 09	44,932	50,579	9,273	13,399
Pennsylvania	PA - 10	48,224	54,286	9,877	14,381
Pennsylvania	PA - 11	63,266	71,217	13,565	18,866
Pennsylvania	PA - 12	77,896	87,686	16,396	23,229
Pennsylvania	PA - 13	74,606	83,983	17,372	22,248
Pennsylvania	PA - 14	90,249	101,592	20,691	26,913
Pennsylvania	PA - 15	71,247	80,202	14,782	21,246
Pennsylvania	PA - 16	65,443	73,669	14,366	19,516
Pennsylvania	PA - 17	56,885	64,034	11,567	16,963
Pennsylvania	PA - 18	69,739	78,504	15,808	20,796
Rhode Island	RI - 01	50,826	57,398	10,855	14,402
Rhode Island	RI - 02	55,252	62,397	11,558	15,656
South Carolina	SC - 01	48,386	53,188	8,621	13,041
South Carolina	SC - 02	51,628	56,751	10,610	13,915
South Carolina	SC - 03	49,700	54,632	10,150	13,395
South Carolina	SC - 04	55,806	61,344	12,628	15,041
South Carolina	SC - 05	43,401	47,708	9,093	11,698
South Carolina	SC - 06	84,011	92,348	16,465	22,643
South Carolina	SC - 07	37,924	41,688	6,848	10,222
South Dakota	SD - 00	84,571	92,685	14,379	19,278
Tennessee	TN - 01	49,177	54,644	10,974	13,907
Tennessee	TN - 02	59,167	65,744	11,838	16,732
Tennessee	TN - 03	59,194	65,774	13,804	16,740
Tennessee	TN - 04	60,252	66,949	15,951	17,039
Tennessee	TN - 05	96,142	106,828	19,186	27,188
Tennessee	TN - 06	52,285	58,096	9,967	14,786
Tennessee	TN - 07	56,193	62,439	10,963	15,891
Tennessee	TN - 08	62,769	69,746	12,051	17,751
Tennessee	TN - 09	72,529	80,591	14,812	20,511
Texas	TX - 01	38,652	43,260	9,664	13,292
Texas	TX - 02	129,567	145,014	38,314	44,559
Texas	TX - 03	57,076	63,881	14,256	19,629
Texas	TX - 04	45,820	51,283	10,240	15,758
Texas	TX - 05	46,851	52,437	10,719	16,112
Texas	TX - 06	48,267	54,022	12,244	16,599
Texas	TX - 07	96,655	108,179	31,299	33,240
Texas	TX - 08	43,713	48,925	9,449	15,033
Texas	TX - 09	62,177	69,590	14,630	21,383
Texas	TX - 10	79,362	88,824	18,113	27,293
Texas	TX - 11	50,523	56,547	12,942	17,375
Texas	TX - 12	62,681	70,154	16,090	21,556
Texas	TX - 13	39,021	43,673	10,367	13,419
Texas	TX - 14	40,182	44,973	18,180	13,819
Texas	TX - 15	49,290	55,167	9,741	16,951
Texas	TX - 16	34,125	38,194	7,746	11,736
Texas	TX - 17	61,834	69,206	14,001	21,265
Texas	TX - 18	114,700	128,375	34,791	39,446
Texas	TX - 19	39,696	44,429	9,029	13,652
Texas	TX - 20	57,153	63,967	13,568	19,655
Texas	TX - 21	114,959	128,664	25,980	39,535

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Texas	TX - 22	46,405	51,937	10,931	15,959
Texas	TX - 23	49,205	55,072	11,870	16,922
Texas	TX - 24	117,011	130,962	30,636	40,241
Texas	TX - 25	83,148	93,061	18,194	28,595
Texas	TX - 26	43,216	48,368	10,069	14,862
Texas	TX - 27	41,719	46,693	12,164	14,347
Texas	TX - 28	38,891	43,528	8,609	13,375
Texas	TX - 29	52,681	58,962	14,795	18,117
Texas	TX - 30	87,660	98,111	23,379	30,146
Texas	TX - 31	49,437	55,331	11,023	17,002
Texas	TX - 32	104,047	116,452	28,162	35,782
Texas	TX - 33	99,601	111,476	27,652	34,253
Texas	TX - 34	34,921	39,085	6,752	12,010
Texas	TX - 35	93,849	105,038	21,220	32,275
Texas	TX - 36	40,325	45,132	11,416	13,868
Utah	UT - 01	49,332	55,107	10,631	13,779
Utah	UT - 02	95,459	106,633	19,958	26,663
Utah	UT - 03	69,624	77,773	13,954	19,446
Utah	UT - 04	78,179	87,330	16,348	21,836
Virginia	VA - 01	57,300	65,286	12,265	19,219
Virginia	VA - 02	60,715	69,176	14,610	20,364
Virginia	VA - 03	97,179	110,723	25,675	32,595
Virginia	VA - 04	56,802	64,718	13,234	19,052
Virginia	VA - 05	64,599	73,602	13,527	21,667
Virginia	VA - 06	59,743	68,069	13,597	20,038
Virginia	VA - 07	73,114	83,303	17,488	24,523
Virginia	VA - 08	81,108	92,412	23,404	27,204
Virginia	VA - 09	49,373	56,253	11,357	16,560
Virginia	VA - 10	103,994	118,487	28,055	34,880
Virginia	VA - 11	93,453	106,477	25,335	31,345
Vermont	VT - 00	60,013	65,225	10,952	14,738
Washington	WA - 01	78,345	87,312	29,284	31,191
Washington	WA - 02	53,567	59,698	16,519	21,326
Washington	WA - 03	34,998	39,004	9,080	13,934
Washington	WA - 04	45,062	50,220	11,579	17,940
Washington	WA - 05	40,902	45,584	9,717	16,284
Washington	WA - 06	46,170	51,455	10,645	18,382
Washington	WA - 07	96,502	107,547	27,260	38,420
Washington	WA - 08	67,575	75,310	22,167	26,903
Washington	WA - 09	112,720	125,621	38,560	44,876
Washington	WA - 10	42,836	47,739	9,611	17,054
Wisconsin	WI - 01	64,901	72,673	12,691	17,716
Wisconsin	WI - 02	77,513	86,794	15,704	21,159
Wisconsin	WI - 03	63,808	71,448	12,461	17,418
Wisconsin	WI - 04	77,666	86,965	14,897	21,200
Wisconsin	WI - 05	85,464	95,697	16,988	23,329
Wisconsin	WI - 06	81,419	91,168	17,819	22,225
Wisconsin	WI - 07	56,702	63,491	11,469	15,478
Wisconsin	WI - 08	68,679	76,903	15,324	18,747
West Virginia	WV - 01	51,228	56,581	9,608	11,806
West Virginia	WV - 02	44,978	49,678	7,363	10,366
West Virginia	WV - 03	37,110	40,988	5,890	8,552
Wyoming	WY - 00	54,235	60,890	11,687	15,697

Appendix C: Topline economic impact by congressional district (ranked by 2020 employment impacts)

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
US Total		28,494,277	31,942,518	7,131,668	9,567,889
New York	NY - 12	297,285	332,556	128,185	131,163
New York	NY - 10	249,243	278,814	97,892	109,966
District of Columbia	DC - 00	150,970	173,229	53,477	72,545
Illinois	IL - 07	137,651	154,760	38,988	49,308
California	CA - 33	132,263	149,237	46,775	54,583
Massachusetts	MA - 07	129,674	146,087	43,170	55,679
Texas	TX - 02	129,567	145,014	38,314	44,559
Florida	FL - 05	125,088	140,637	27,266	36,018
Pennsylvania	PA - 07	119,729	134,778	28,852	35,704
Massachusetts	MA - 08	117,748	132,651	37,912	50,558
Texas	TX - 24	117,011	130,962	30,636	40,241
Colorado	CO - 01	116,978	133,210	31,680	40,879
Texas	TX - 21	114,959	128,664	25,980	39,535
Texas	TX - 18	114,700	128,375	34,791	39,446
North Carolina	NC - 12	113,245	127,147	26,255	33,460
Minnesota	MN - 05	112,875	127,784	29,045	36,197
Washington	WA - 09	112,720	125,621	38,560	44,876
Georgia	GA - 05	109,532	122,212	28,181	35,388
New York	NY - 07	109,032	121,968	34,310	48,105
Georgia	GA - 06	108,962	121,575	30,034	35,204
Arizona	AZ - 09	108,293	120,265	25,113	32,241
Illinois	IL - 08	107,863	121,270	29,689	38,638
Florida	FL - 22	106,627	119,882	23,720	30,702
Massachusetts	MA - 05	106,586	120,077	39,028	45,766
Maryland	MD - 03	106,372	119,735	26,843	37,596
Texas	TX - 32	104,047	116,452	28,162	35,782
Virginia	VA - 10	103,994	118,487	28,055	34,880
California	CA - 52	101,840	114,909	33,586	42,028
Missouri	MO - 01	101,150	113,884	22,113	28,738
Missouri	MO - 02	100,755	113,439	21,437	28,626
Florida	FL - 10	100,393	112,872	20,993	28,907
Minnesota	MN - 03	100,033	113,246	25,796	32,079
Texas	TX - 33	99,601	111,476	27,652	34,253
Nevada	NV - 01	99,479	112,982	19,638	27,553
Illinois	IL - 05	97,425	109,534	25,017	34,898
Virginia	VA - 03	97,179	110,723	25,675	32,595
Arizona	AZ - 07	96,831	107,536	21,567	28,829
Florida	FL - 20	96,676	108,693	20,744	27,837
Texas	TX - 07	96,655	108,179	31,299	33,240
Washington	WA - 07	96,502	107,547	27,260	38,420
Tennessee	TN - 05	96,142	106,828	19,186	27,188
Utah	UT - 02	95,459	106,633	19,958	26,663
North Carolina	NC - 04	95,444	107,161	20,441	28,201
Florida	FL - 14	94,458	106,200	21,749	27,198
Ohio	OH - 11	94,384	106,494	20,050	27,291
New York	NY - 03	94,344	105,538	30,903	41,625
Oregon	OR - 03	94,240	106,215	20,867	27,540
Texas	TX - 35	93,849	105,038	21,220	32,275
Montana	MT - 00	93,766	104,113	15,748	21,229
Virginia	VA - 11	93,453	106,477	25,335	31,345
New Jersey	NJ - 12	93,097	105,264	27,704	35,688
Delaware	DE - 00	92,805	104,421	23,825	31,958
Louisiana	LA - 02	91,925	102,361	23,924	29,543
Illinois	IL - 06	91,502	102,875	24,498	32,777

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Massachusetts	MA - 04	91,380	102,946	29,339	39,237
Ohio	OH - 15	91,099	102,787	19,210	26,341
California	CA - 18	90,749	102,394	30,352	37,451
California	CA - 37	90,272	101,857	28,197	37,254
Pennsylvania	PA - 14	90,249	101,592	20,691	26,913
Connecticut	CT - 01	89,911	100,401	30,268	37,875
California	CA - 12	89,592	101,089	28,451	36,973
Pennsylvania	PA - 06	89,227	100,442	22,190	26,608
Pennsylvania	PA - 02	89,009	100,196	19,139	26,543
California	CA - 46	88,938	100,352	26,133	36,703
Georgia	GA - 11	87,982	98,167	22,155	28,426
Texas	TX - 30	87,660	98,111	23,379	30,146
Michigan	MI - 11	87,631	97,903	21,062	28,182
California	CA - 17	87,382	98,595	31,511	36,061
North Dakota	ND - 00	86,352	96,674	17,262	23,154
New Jersey	NJ - 07	86,032	97,276	27,153	32,980
California	CA - 34	85,939	96,968	23,597	35,466
Ohio	OH - 03	85,653	96,642	17,796	24,766
Wisconsin	WI - 05	85,464	95,697	16,988	23,329
Ohio	OH - 01	85,169	96,097	18,468	24,626
Indiana	IN - 07	84,927	93,570	17,416	24,174
Massachusetts	MA - 06	84,625	95,337	28,175	36,336
South Dakota	SD - 00	84,571	92,685	14,379	19,278
South Carolina	SC - 06	84,011	92,348	16,465	22,643
New Jersey	NJ - 06	83,475	94,385	24,056	31,999
Indiana	IN - 05	83,333	91,814	16,089	23,720
Colorado	CO - 06	83,252	94,804	22,323	29,093
Texas	TX - 25	83,148	93,061	18,194	28,595
Florida	FL - 27	82,883	93,186	18,805	23,865
Minnesota	MN - 04	81,992	92,823	18,830	26,293
Wisconsin	WI - 06	81,419	91,168	17,819	22,225
Pennsylvania	PA - 01	81,134	91,331	18,184	24,195
Virginia	VA - 08	81,108	92,412	23,404	27,204
Illinois	IL - 09	80,766	90,805	20,698	28,931
California	CA - 28	80,353	90,665	26,602	33,161
Maryland	MD - 07	80,019	90,071	20,012	28,282
Oregon	OR - 01	79,973	90,136	18,234	23,371
Michigan	MI - 09	79,874	89,236	20,562	25,687
Texas	TX - 10	79,362	88,824	18,113	27,293
Iowa	IA - 02	79,324	86,967	14,888	20,658
Oklahoma	OK - 05	79,064	88,198	15,369	20,615
Iowa	IA - 03	79,003	86,615	15,683	20,574
Michigan	MI - 14	78,898	88,146	21,912	25,373
Oregon	OR - 05	78,772	88,782	16,452	23,020
Iowa	IA - 04	78,741	86,328	15,055	20,506
Iowa	IA - 01	78,723	86,308	15,805	20,501
Washington	WA - 01	78,345	87,312	29,284	31,191
Utah	UT - 04	78,179	87,330	16,348	21,836
Pennsylvania	PA - 12	77,896	87,686	16,396	23,229
California	CA - 53	77,811	87,796	21,242	32,111
Wisconsin	WI - 04	77,666	86,965	14,897	21,200
Wisconsin	WI - 02	77,513	86,794	15,704	21,159
Colorado	CO - 02	77,228	87,944	20,947	26,988
North Carolina	NC - 09	77,146	86,617	17,852	22,794
Kansas	KS - 03	76,839	86,041	16,110	21,050

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Missouri	MO - 05	76,681	86,334	18,248	21,786
Arizona	AZ - 06	76,373	84,816	17,832	22,738
California	CA - 30	76,151	85,924	25,157	31,426
Maryland	MD - 02	76,031	85,582	20,483	26,872
Missouri	MO - 03	75,958	85,521	15,544	21,581
North Carolina	NC - 13	75,262	84,501	17,544	22,238
New Jersey	NJ - 11	74,850	84,633	22,415	28,693
Pennsylvania	PA - 13	74,606	83,983	17,372	22,248
Colorado	CO - 04	74,535	84,878	18,936	26,047
Alabama	AL - 07	74,484	81,715	17,304	21,458
Ohio	OH - 12	74,296	83,829	16,658	21,483
Idaho	ID - 02	74,059	81,746	13,390	17,469
Florida	FL - 24	73,827	83,005	16,619	21,258
California	CA - 27	73,753	83,218	20,252	30,437
Nebraska	NE - 02	73,388	82,196	14,169	18,639
Florida	FL - 23	73,127	82,217	16,257	21,056
Virginia	VA - 07	73,114	83,303	17,488	24,523
Connecticut	CT - 03	73,038	81,560	22,640	30,767
California	CA - 45	72,990	82,356	24,515	30,122
Michigan	MI - 02	72,917	81,465	16,867	23,450
New Hampshire	NH - 01	72,871	79,788	16,513	21,714
New Jersey	NJ - 08	72,702	82,204	22,604	27,870
Tennessee	TN - 09	72,529	80,591	14,812	20,511
Kentucky	KY - 03	72,458	79,970	16,310	19,885
Florida	FL - 09	72,162	81,133	15,323	20,778
Kansas	KS - 01	72,003	80,625	14,515	19,725
California	CA - 47	71,786	80,998	24,794	29,625
Louisiana	LA - 06	71,785	79,935	17,874	23,071
Connecticut	CT - 05	71,604	79,958	21,642	30,163
New Hampshire	NH - 02	71,323	78,093	15,534	21,253
California	CA - 48	71,275	80,421	21,575	29,414
Pennsylvania	PA - 15	71,247	80,202	14,782	21,246
New Jersey	NJ - 10	70,440	79,647	20,758	27,003
Colorado	CO - 07	70,410	80,180	19,104	24,605
Illinois	IL - 14	70,408	79,159	17,985	25,221
Florida	FL - 25	70,241	78,973	16,367	20,225
Minnesota	MN - 06	70,132	79,396	16,202	22,490
Illinois	IL - 10	69,818	78,496	19,462	25,009
Pennsylvania	PA - 18	69,739	78,504	15,808	20,796
California	CA - 39	69,660	78,600	20,819	28,748
Utah	UT - 03	69,624	77,773	13,954	19,446
Ohio	OH - 04	69,608	78,539	17,225	20,127
Ohio	OH - 02	69,464	78,377	14,997	20,085
Ohio	OH - 16	69,460	78,372	13,841	20,084
Hawaii	HI - 01	68,771	76,757	14,213	18,280
Wisconsin	WI - 08	68,679	76,903	15,324	18,747
Ohio	OH - 07	68,589	77,389	14,398	19,832
Kentucky	KY - 04	68,495	75,596	13,395	18,797
New York	NY - 20	68,333	76,440	21,951	30,149
California	CA - 35	68,123	76,866	19,693	28,113
North Carolina	NC - 01	68,116	76,477	16,119	20,126
Louisiana	LA - 01	67,925	75,636	15,594	21,830
Connecticut	CT - 04	67,721	75,622	23,200	28,527
Nebraska	NE - 01	67,585	75,697	12,954	17,165

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Washington	WA - 08	67,575	75,310	22,167	26,903
Nebraska	NE - 03	67,352	75,436	12,324	17,106
Maine	ME - 01	67,180	73,830	11,809	16,105
Oklahoma	OK - 01	66,951	74,686	13,824	17,456
California	CA - 49	66,553	75,094	23,361	27,465
New Jersey	NJ - 09	66,400	75,078	19,160	25,454
New York	NY - 02	66,397	74,274	20,865	29,294
Arkansas	AR - 03	66,252	74,315	11,944	16,143
New York	NY - 26	66,240	74,099	21,769	29,225
California	CA - 19	66,201	74,697	23,195	27,320
Georgia	GA - 07	65,887	73,514	16,862	21,287
Ohio	OH - 14	65,762	74,200	15,306	19,015
Indiana	IN - 02	65,492	72,158	14,588	18,642
Pennsylvania	PA - 16	65,443	73,669	14,366	19,516
Michigan	MI - 03	65,165	72,804	15,157	20,957
California	CA - 43	65,070	73,420	21,056	26,853
Missouri	MO - 06	64,999	73,182	14,904	18,467
Wisconsin	WI - 01	64,901	72,673	12,691	17,716
Florida	FL - 04	64,891	72,958	14,636	18,685
Arkansas	AR - 02	64,857	72,750	11,327	15,803
Maryland	MD - 08	64,744	72,878	18,720	22,883
New York	NY - 14	64,602	72,267	21,176	28,503
Virginia	VA - 05	64,599	73,602	13,527	21,667
New Jersey	NJ - 04	64,542	72,978	16,765	24,742
New York	NY - 27	64,429	72,073	19,300	28,426
Pennsylvania	PA - 04	64,156	72,220	13,536	19,132
Wisconsin	WI - 03	63,808	71,448	12,461	17,418
Florida	FL - 07	63,637	71,547	13,867	18,324
Kentucky	KY - 02	63,624	70,220	13,053	17,460
Illinois	IL - 11	63,480	71,370	17,401	22,739
Kansas	KS - 04	63,416	71,010	13,167	17,373
Illinois	IL - 03	63,305	71,173	17,106	22,676
Pennsylvania	PA - 11	63,266	71,217	13,565	18,866
Tennessee	TN - 08	62,769	69,746	12,051	17,751
Texas	TX - 12	62,681	70,154	16,090	21,556
Minnesota	MN - 01	62,507	70,764	14,315	20,045
Kentucky	KY - 06	62,454	68,929	13,100	17,139
Alaska	AK - 00	62,312	70,148	14,781	19,901
California	CA - 40	62,286	70,280	17,109	25,705
Texas	TX - 09	62,177	69,590	14,630	21,383
Massachusetts	MA - 02	62,168	70,037	17,546	26,694
California	CA - 38	61,969	69,921	18,175	25,573
Texas	TX - 17	61,834	69,206	14,001	21,265
New York	NY - 24	61,791	69,122	18,769	27,262
Indiana	IN - 04	61,754	68,039	13,312	17,578
New York	NY - 04	61,689	69,008	18,206	27,217
Mississippi	MS - 03	61,607	67,031	10,988	14,483
North Carolina	NC - 06	61,538	69,093	13,936	18,183
New York	NY - 25	61,349	68,628	18,485	27,067
Virginia	VA - 02	60,715	69,176	14,610	20,364
Kansas	KS - 02	60,646	67,908	11,942	16,614
Indiana	IN - 09	60,431	66,581	11,667	17,202
California	CA - 06	60,430	68,185	15,536	24,939
New Jersey	NJ - 05	60,362	68,250	15,917	23,139
New Mexico	NM - 01	60,316	67,207	11,896	16,360

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Georgia	GA - 13	60,286	67,265	12,997	19,478
North Carolina	NC - 02	60,282	67,682	12,784	17,811
Tennessee	TN - 04	60,252	66,949	15,951	17,039
Indiana	IN - 03	60,140	66,260	13,647	17,119
Vermont	VT - 00	60,013	65,225	10,952	14,738
Virginia	VA - 06	59,743	68,069	13,597	20,038
California	CA - 15	59,664	67,321	24,429	24,623
Idaho	ID - 01	59,593	65,778	10,037	14,057
Arkansas	AR - 04	59,531	66,776	11,343	14,505
Oklahoma	OK - 03	59,509	66,385	11,970	15,516
New York	NY - 01	59,463	66,518	18,010	26,235
Indiana	IN - 08	59,339	65,379	13,211	16,891
Tennessee	TN - 03	59,194	65,774	13,804	16,740
Tennessee	TN - 02	59,167	65,744	11,838	16,732
Michigan	MI - 08	59,156	66,090	13,144	19,024
Ohio	OH - 08	58,935	66,497	12,732	17,041
Minnesota	MN - 07	58,730	66,488	12,773	18,834
Indiana	IN - 06	58,565	64,525	12,328	16,670
Michigan	MI - 07	58,361	65,203	14,011	18,769
New York	NY - 17	58,337	65,258	18,976	25,738
Massachusetts	MA - 03	57,962	65,299	18,512	24,888
Michigan	MI - 12	57,674	64,435	13,764	18,548
New Jersey	NJ - 03	57,469	64,980	15,219	22,030
North Carolina	NC - 05	57,337	64,375	12,502	16,941
Virginia	VA - 01	57,300	65,286	12,265	19,219
Texas	TX - 20	57,153	63,967	13,568	19,655
Texas	TX - 03	57,076	63,881	14,256	19,629
New York	NY - 08	56,937	63,693	15,764	25,121
Pennsylvania	PA - 17	56,885	64,034	11,567	16,963
Virginia	VA - 04	56,802	64,718	13,234	19,052
Ohio	OH - 13	56,742	64,023	11,858	16,407
Wisconsin	WI - 07	56,702	63,491	11,469	15,478
Michigan	MI - 13	56,536	63,163	13,098	18,182
Illinois	IL - 13	56,504	63,528	15,683	20,240
New York	NY - 23	56,473	63,173	15,002	24,916
Missouri	MO - 07	56,207	63,283	11,082	15,969
Tennessee	TN - 07	56,193	62,439	10,963	15,891
Alabama	AL - 06	56,185	61,640	11,353	16,186
California	CA - 14	56,114	63,315	21,166	23,157
Kentucky	KY - 01	55,892	61,687	11,363	15,339
South Carolina	SC - 04	55,806	61,344	12,628	15,041
Maine	ME - 02	55,785	61,308	10,104	13,373
Pennsylvania	PA - 08	55,753	62,760	12,623	16,626
Florida	FL - 15	55,523	62,425	12,364	15,987
Rhode Island	RI - 02	55,252	62,397	11,558	15,656
Oregon	OR - 04	55,222	62,240	11,672	16,138
New York	NY - 19	54,715	61,206	14,173	24,140
Nevada	NV - 03	54,627	62,042	11,189	15,130
California	CA - 21	54,383	61,362	15,212	22,443
Wyoming	WY - 00	54,235	60,890	11,687	15,697
Ohio	OH - 05	54,157	61,105	11,163	15,659
California	CA - 11	53,653	60,538	19,226	22,142
Massachusetts	MA - 09	53,605	60,389	13,858	23,017
Washington	WA - 02	53,567	59,698	16,519	21,326
Minnesota	MN - 02	53,511	60,579	13,402	17,160

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Illinois	IL - 18	53,498	60,147	13,463	19,163
California	CA - 03	53,415	60,270	15,463	22,044
Oregon	OR - 02	53,392	60,177	11,366	15,603
Maryland	MD - 04	53,265	59,956	13,430	18,826
Louisiana	LA - 03	53,183	59,220	14,543	17,092
Minnesota	MN - 08	52,881	59,866	11,238	16,958
Oklahoma	OK - 04	52,812	58,913	10,133	13,770
Texas	TX - 29	52,681	58,962	14,795	18,117
California	CA - 32	52,596	59,346	15,680	21,706
Missouri	MO - 04	52,434	59,035	9,576	14,897
Georgia	GA - 10	52,392	58,457	11,015	16,927
Pennsylvania	PA - 03	52,351	58,931	11,343	15,611
Florida	FL - 13	52,343	58,850	11,051	15,072
California	CA - 44	52,334	59,050	19,299	21,598
Tennessee	TN - 06	52,285	58,096	9,967	14,786
California	CA - 41	52,061	58,742	14,364	21,485
South Carolina	SC - 02	51,628	56,751	10,610	13,915
New York	NY - 18	51,511	57,622	14,157	22,727
Florida	FL - 19	51,408	57,799	10,128	14,803
Maryland	MD - 06	51,351	57,802	14,419	18,150
Illinois	IL - 04	51,319	57,698	12,704	18,383
West Virginia	WV - 01	51,228	56,581	9,608	11,806
California	CA - 51	50,838	57,362	13,609	20,980
Rhode Island	RI - 01	50,826	57,398	10,855	14,402
North Carolina	NC - 07	50,738	56,967	10,647	14,992
California	CA - 05	50,570	57,059	16,893	20,869
Texas	TX - 11	50,523	56,547	12,942	17,375
Ohio	OH - 09	50,162	56,598	11,301	14,504
Massachusetts	MA - 01	50,132	56,478	13,415	21,526
California	CA - 13	50,035	56,456	14,698	20,649
Illinois	IL - 17	49,894	56,096	12,386	17,873
South Carolina	SC - 03	49,700	54,632	10,150	13,395
Texas	TX - 31	49,437	55,331	11,023	17,002
Illinois	IL - 01	49,422	55,565	11,596	17,703
Virginia	VA - 09	49,373	56,253	11,357	16,560
Utah	UT - 01	49,332	55,107	10,631	13,779
Texas	TX - 15	49,290	55,167	9,741	16,951
Ohio	OH - 10	49,223	55,538	10,020	14,233
Texas	TX - 23	49,205	55,072	11,870	16,922
Tennessee	TN - 01	49,177	54,644	10,974	13,907
California	CA - 22	49,109	55,411	13,120	20,266
New Mexico	NM - 02	49,048	54,651	9,671	13,304
Mississippi	MS - 02	49,033	53,350	9,013	11,527
California	CA - 02	48,974	55,258	13,643	20,211
Florida	FL - 21	48,889	54,967	10,452	14,077
New York	NY - 22	48,851	54,647	13,563	21,553
Pennsylvania	PA - 05	48,632	54,744	10,523	14,502
Florida	FL - 18	48,532	54,565	10,065	13,974
California	CA - 16	48,456	54,674	13,347	19,997
South Carolina	SC - 01	48,386	53,188	8,621	13,041
Arkansas	AR - 01	48,336	54,218	8,745	11,777
New Jersey	NJ - 02	48,297	54,609	11,625	18,514
Texas	TX - 06	48,267	54,022	12,244	16,599
Pennsylvania	PA - 10	48,224	54,286	9,877	14,381
Oklahoma	OK - 02	48,135	53,696	8,217	12,550

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
California	CA - 23	48,084	54,255	13,380	19,844
Georgia	GA - 09	48,068	53,633	10,817	15,530
New York	NY - 21	48,016	53,713	12,622	21,185
Nevada	NV - 02	47,991	54,505	10,263	13,292
California	CA - 50	47,886	54,031	13,427	19,762
Alabama	AL - 02	47,582	52,201	10,475	13,708
North Carolina	NC - 08	47,542	53,378	9,463	14,047
Connecticut	CT - 02	47,438	52,973	12,484	19,983
California	CA - 24	47,378	53,458	13,382	19,552
New Jersey	NJ - 01	47,250	53,426	12,093	18,113
Louisiana	LA - 05	47,248	52,612	9,026	15,185
Georgia	GA - 02	47,208	52,673	10,808	15,252
Illinois	IL - 16	46,917	52,749	13,187	16,806
Arizona	AZ - 03	46,904	52,089	10,501	13,964
Texas	TX - 05	46,851	52,437	10,719	16,112
California	CA - 04	46,812	52,819	12,497	19,318
Louisiana	LA - 04	46,775	52,085	9,549	15,033
Michigan	MI - 06	46,592	52,054	11,594	14,984
Colorado	CO - 03	46,453	52,899	10,390	16,233
Texas	TX - 22	46,405	51,937	10,931	15,959
California	CA - 31	46,387	52,340	12,178	19,143
Maryland	MD - 01	46,295	52,110	11,220	16,362
Washington	WA - 06	46,170	51,455	10,645	18,382
Michigan	MI - 04	45,968	51,357	10,482	14,783
New York	NY - 06	45,950	51,402	13,962	20,273
Texas	TX - 04	45,820	51,283	10,240	15,758
North Carolina	NC - 03	45,317	50,880	9,546	13,390
Washington	WA - 04	45,062	50,220	11,579	17,940
Missouri	MO - 08	44,997	50,661	8,420	12,784
West Virginia	WV - 02	44,978	49,678	7,363	10,366
New Mexico	NM - 03	44,932	50,065	9,444	12,187
Pennsylvania	PA - 09	44,932	50,579	9,273	13,399
Georgia	GA - 03	44,601	49,764	10,641	14,410
California	CA - 07	44,564	50,283	12,107	18,391
Indiana	IN - 01	44,460	48,984	10,261	12,655
Colorado	CO - 05	44,457	50,626	10,217	15,536
Georgia	GA - 04	44,363	49,498	10,095	14,333
Hawaii	HI - 02	44,316	49,463	8,051	11,780
Alabama	AL - 03	44,277	48,576	9,169	12,756
Mississippi	MS - 01	44,242	48,138	7,154	10,401
Georgia	GA - 08	44,218	49,337	10,179	14,286
Alabama	AL - 05	44,201	48,493	9,393	12,734
Florida	FL - 16	43,785	49,228	8,221	12,608
New York	NY - 13	43,750	48,940	11,660	19,303
Texas	TX - 08	43,713	48,925	9,449	15,033
South Carolina	SC - 05	43,401	47,708	9,093	11,698
California	CA - 29	43,371	48,936	13,115	17,898
California	CA - 26	43,236	48,785	12,977	17,843
Texas	TX - 26	43,216	48,368	10,069	14,862
Arizona	AZ - 02	43,084	47,847	9,440	12,827
California	CA - 42	43,067	48,594	11,875	17,773
Ohio	OH - 06	42,945	48,455	8,713	12,417
Washington	WA - 10	42,836	47,739	9,611	17,054
Alabama	AL - 04	42,602	46,738	9,567	12,273
Florida	FL - 17	42,444	47,720	8,567	12,221

Topline economic impacts		Jobs		Sales Activity (millions of USD)	
State	Congressional District	2020	2026	2020	2026
Florida	FL - 03	42,355	47,621	8,294	12,196
Mississippi	MS - 04	42,249	45,969	7,347	9,932
Florida	FL - 12	42,214	47,462	8,656	12,155
Florida	FL - 02	42,064	47,294	8,136	12,112
North Carolina	NC - 10	42,032	47,191	8,597	12,419
New York	NY - 16	41,892	46,863	12,218	18,483
California	CA - 01	41,809	47,174	10,639	17,254
Illinois	IL - 15	41,755	46,945	11,179	14,957
Texas	TX - 27	41,719	46,693	12,164	14,347
New York	NY - 05	41,357	46,263	10,532	18,247
New York	NY - 11	40,985	45,848	11,272	18,083
Washington	WA - 05	40,902	45,584	9,717	16,284
Maryland	MD - 05	40,560	45,655	10,803	14,335
Michigan	MI - 10	40,439	45,180	9,843	13,005
Texas	TX - 36	40,325	45,132	11,416	13,868
Texas	TX - 14	40,182	44,973	18,180	13,819
Arizona	AZ - 01	39,988	44,408	8,207	11,905
Florida	FL - 06	39,909	44,870	7,809	11,491
North Carolina	NC - 11	39,850	44,742	7,807	11,774
Florida	FL - 01	39,845	44,798	8,449	11,473
Texas	TX - 19	39,696	44,429	9,029	13,652
Illinois	IL - 02	39,317	44,204	11,438	14,084
Alabama	AL - 01	39,099	42,895	7,480	11,264
Texas	TX - 13	39,021	43,673	10,367	13,419
California	CA - 20	38,956	43,955	10,083	16,076
Texas	TX - 28	38,891	43,528	8,609	13,375
Illinois	IL - 12	38,707	43,518	10,457	13,865
California	CA - 10	38,690	43,655	14,788	15,967
Texas	TX - 01	38,652	43,260	9,664	13,292
Florida	FL - 08	38,437	43,215	7,842	11,067
Georgia	GA - 12	38,396	42,841	8,735	12,405
California	CA - 25	38,251	43,160	11,231	15,786
Kentucky	KY - 05	38,150	42,105	6,596	10,470
New York	NY - 09	38,119	42,641	10,704	16,818
South Carolina	SC - 07	37,924	41,688	6,848	10,222
Georgia	GA - 01	37,654	42,013	8,760	12,166
Arizona	AZ - 05	37,555	41,706	8,150	11,181
Michigan	MI - 05	37,515	41,913	8,060	12,065
Florida	FL - 26	37,329	41,969	6,836	10,748
West Virginia	WV - 03	37,110	40,988	5,890	8,552
California	CA - 09	36,954	41,696	9,907	15,250
Georgia	GA - 14	36,903	41,175	8,261	11,923
California	CA - 08	36,678	41,385	9,388	15,137
Michigan	MI - 01	36,576	40,864	7,263	11,763
Arizona	AZ - 04	35,304	39,206	7,583	10,511
Washington	WA - 03	34,998	39,004	9,080	13,934
Texas	TX - 34	34,921	39,085	6,752	12,010
Florida	FL - 11	34,768	39,090	6,654	10,011
California	CA - 36	34,551	38,985	8,128	14,259
Texas	TX - 16	34,125	38,194	7,746	11,736
Nevada	NV - 04	32,594	37,018	6,960	9,028
Arizona	AZ - 08	32,300	35,870	6,223	9,616
New York	NY - 15	27,649	30,929	8,289	12,199

Appendix D: Economic impact summary by industry

Employment supported by advertising spending (thousands of workers)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Agriculture, Forestry, Fishing and Hunting	805	835	791	812	835	838	852	870	886
Mining, Quarrying, Oil and Gas Extraction	397	410	400	420	445	456	471	486	502
Utilities	128	134	130	134	131	125	121	117	112
Construction	239	245	220	242	260	265	267	270	275
Manufacturing	2,130	2,178	2,061	2,149	2,209	2,202	2,191	2,182	2,179
Wholesale Trade	711	690	692	735	817	841	855	859	849
Retail Trade	7,441	7,270	6,477	6,664	6,593	6,267	6,018	5,956	5,933
Transportation and Warehousing	1,281	1,315	1,309	1,405	1,423	1,444	1,450	1,463	1,464
Information	736	695	613	629	651	640	626	609	597
Finance and Insurance	1,952	1,953	1,861	1,922	2,000	2,010	2,009	2,001	1,977
Real Estate and Rental and Leasing	236	236	210	224	242	247	248	247	242
Professional, Scientific and Technical Services	3,573	3,608	3,502	3,760	3,943	4,144	4,285	4,423	4,490
Management of Companies and Enterprises	2,305	2,276	2,077	2,235	2,505	2,679	2,806	2,895	2,919
Administrative and Support Services	1,027	992	911	1,001	1,101	1,126	1,187	1,219	1,210
Educational Services	2,817	2,838	2,608	2,628	2,827	2,845	2,802	2,751	2,712
Health Care and Social Assistance	638	644	597	610	619	637	645	642	636
Arts, Entertainment, and Recreation	2,180	2,197	2,289	2,508	2,686	2,752	2,815	2,930	3,066
Accommodation and Food Services	546	546	524	513	476	487	493	479	476
Other Services	912	925	907	923	991	1,025	1,034	1,040	1,042
Public Administration	323	319	301	312	328	338	349	355	359
Total	30,377	30,305	28,480	29,828	31,085	31,367	31,523	31,794	31,928

Source: IHS Markit

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Sales activity (output) supported by advertising spending (\$B)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Agriculture, Forestry, Fishing and Hunting	62	63	59	65	69	71	73	76	79
Mining, Quarrying, Oil and Gas Extraction	89	91	86	94	100	103	107	111	115
Utilities	119	121	115	125	133	137	143	148	153
Construction	59	60	58	63	66	68	70	73	75
Manufacturing	999	1,019	954	1,049	1,117	1,151	1,192	1,236	1,278
Wholesale Trade	248	245	245	264	286	295	305	315	323
Retail Trade	884	910	883	960	1,026	1,063	1,105	1,148	1,195
Transportation and Warehousing	320	328	286	316	340	353	365	379	392
Information	449	457	435	463	487	500	515	531	546
Finance and Insurance	959	988	967	1,021	1,072	1,110	1,156	1,207	1,262
Real Estate and Rental and Leasing	412	423	401	437	466	483	501	520	539
Professional, Scientific and Technical Services	1,254	1,298	1,220	1,353	1,446	1,507	1,563	1,619	1,677
Management of Companies and Enterprises	365	374	357	387	411	426	442	460	478
Administrative and Support Services	150	152	146	158	170	175	182	188	195
Educational Services	228	233	221	239	255	264	274	285	296
Health Care and Social Assistance	80	82	77	83	89	93	98	103	108
Arts, Entertainment, and Recreation	338	346	304	343	374	388	403	419	435
Accommodation and Food Services	49	51	48	52	55	57	60	62	64
Other Services	141	144	136	148	158	163	170	176	183
Public Administration	125	128	121	131	140	145	150	156	162
Total	7,329	7,514	7,118	7,754	8,258	8,552	8,875	9,211	9,554

Source: IHS Markit

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Value added (contributions to GDP) supported by advertising spending (\$B)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Agriculture, Forestry, Fishing and Hunting	24	25	23	25	27	28	29	30	31
Mining, Quarrying, Oil and Gas Extraction	26	26	25	27	29	30	31	32	33
Utilities	53	54	51	56	59	61	63	66	68
Construction	31	32	31	33	35	36	37	39	40
Manufacturing	313	319	298	328	350	360	373	387	400
Wholesale Trade	95	94	94	101	110	113	117	121	124
Retail Trade	521	536	520	565	604	626	651	676	704
Transportation and Warehousing	198	204	177	196	211	219	227	235	243
Information	243	248	235	251	263	271	279	288	296
Finance and Insurance	532	548	537	567	595	616	641	670	700
Real Estate and Rental and Leasing	207	213	202	220	234	242	252	261	271
Professional, Scientific and Technical Services	795	823	776	859	917	955	992	1,027	1,064
Management of Companies and Enterprises	239	245	234	254	270	280	290	302	313
Administrative and Support Services	104	106	101	110	118	122	127	131	136
Educational Services	139	143	135	146	156	161	168	174	181
Health Care and Social Assistance	55	57	53	58	61	65	68	71	75
Arts, Entertainment, and Recreation	208	213	187	211	230	239	248	258	268
Accommodation and Food Services	32	33	31	34	36	37	39	40	42
Other Services	82	84	79	86	92	95	99	103	107
Public Administration	76	78	74	80	85	88	91	95	98
Total	3,975	4,078	3,864	4,208	4,482	4,644	4,821	5,004	5,192

Source: IHS Markit

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Labor income supported by advertising spending (\$B)									
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Agriculture, Forestry, Fishing and Hunting	17	17	16	17	18	19	19	20	21
Mining, Quarrying, Oil and Gas Extraction	10	10	9	10	11	11	12	12	13
Utilities	16	17	16	17	18	19	20	20	21
Construction	25	26	25	27	28	29	30	31	32
Manufacturing	159	162	152	167	178	183	190	197	204
Wholesale Trade	34	34	34	36	39	41	42	43	45
Retail Trade	251	258	250	272	291	301	313	325	339
Transportation and Warehousing	124	128	111	123	132	137	142	147	152
Information	196	200	190	202	213	219	225	232	239
Finance and Insurance	227	234	229	242	254	263	274	286	299
Real Estate and Rental and Leasing	118	121	115	125	133	138	143	148	154
Professional, Scientific and Technical Services	211	219	201	225	243	254	263	271	281
Management of Companies and Enterprises	191	196	187	203	216	224	232	241	251
Administrative and Support Services	90	92	88	96	103	106	110	114	118
Educational Services	115	118	112	121	129	133	138	144	149
Health Care and Social Assistance	49	51	47	52	55	58	61	64	67
Arts, Entertainment, and Recreation	186	190	168	189	206	214	222	231	239
Accommodation and Food Services	21	22	21	23	24	25	26	27	28
Other Services	54	55	52	57	60	62	65	67	70
Public Administration	67	69	65	71	76	78	81	84	87
Total	2,163	2,217	2,087	2,275	2,426	2,513	2,607	2,706	2,807

Source: IHS Markit

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Appendix E: Theory and methodology

IRS Statistics of Income data by industry

This study aimed to assess the direct, indirect (supplier and inter-industry) and induced economic impacts of advertising expenditures on the US economy. Companies in every industry use some form of advertising to establish and reinforce brand awareness, promote their products and services, and ultimately stimulate revenue. Higher sales trigger additional economic activity throughout a company's supply chain, its suppliers' supply chain, and so on. This leads to enhanced levels of job creation and retention, which facilitates the final layer of economic impacts: the sales generated from consumers making purchases with earned income from these operations.

To quantify the economic impact of advertising expenditures on the US economy, this study:

- Estimated the total level of advertising spending in the United States and created a 5-year forecast.
- Estimated sales, employment, value added and labor income impacts based on econometric models that quantify the relationship between ad spending and resulting sales.
- Used input-output methodologies to compute the ripple effect of economic activity that happens as a result of the sales from ad spending.
- Simultaneously allocated advertising to every state, congressional district and 20 NAICS-based industry aggregates using proprietary macroeconomic, regional and industry models.

The Economic Drivers of Advertising Expenditures

At the foundation, this study built upon a model originally developed by Dr. Klein designed to answer the question: Holding all other factors equal, what percent change in advertising spending would result from a given percent change in the cost of advertising? This model has important policy implications concerning a potential increase in the cost of advertising that would result from reducing or eliminating the federal tax deductibility of ad spending.

Using the IRS tax statistics database, IHS Markit was able to collect industry-level advertising expenditure information that was reported on each corporation income tax form. A reformation of the model specification was needed as a result of revised historical

data and a change in the source data of the dependent variable. The structure of the economy was much different when the model was first developed and subsequently the regressor data had a different statistical form. Thus, the old model did not provide an optimal fit of the data.

The model uses ordinary least squares regression analysis to explain the quarterly percent change in real advertising spending as a linear function of three broad macroeconomic factors: household consumption, the rate of unemployment, and the price of advertising relative to the price of other goods and services. The specification of the equation allows us to control for those factors that determine advertising spending, yet still isolate the effect of the driver that is of interest for this study – the relative price of advertising.

- Real consumer spending per household indicates the overall strength of the consumer market. This factor provides a broad measure of the potential sales opportunities that can be expected in the marketplace.
- The health of labor market – as represented by the unemployment rate – provides a useful measure of changes to personal income potential and additional sales.
- Firms that advertise consider the cost of advertising relative to other goods and services that could be purchased.

Regression Analysis for Total Advertising Expenditures				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.059693	0.622191	6.524836	0.0000
LOG(P5418/JPGDP)	-0.836012	0.211957	-3.944249	0.0002
RUC	-0.027491	0.006101	-4.505974	0.0000
LOG(CONSR/NHH)	0.899678	0.140065	6.423278	0.0000
R-squared	0.981737	Mean dependent var		7.938786
Adjusted R-squared	0.980236	S.D. dependent var		0.086727
S.E. of regression	0.012192	Akaike info criterion		-5.849965
Sum squared resid	0.010852	Schwarz criterion		-5.641538
Log likelihood	240.9986	Hannan-Quinn criter.		-5.766401
F-statistic	654.0384	Durbin-Watson stat		1.129806
Prob(F-statistic)	0.000000			

The results of the regression model are presented in the table above. The most important discovery of this linear regression model is that increases in the cost of advertising give companies a disincentive to spend. The coefficient of -0.84 on relative cost of advertising (P5418/JPGDP) indicates that a one-percent increase in the price of advertising results in a 0.84% decrease in real ad spending. The adjusted R-squared statistic of 0.98 means that 98 percent of the variation in real advertising spending is explained by the regressors.

Input-Output Analysis and IMPLAN

The economic impacts in this report were quantified through input-output (I-O) modeling and social accounting matrices (SAM). I-O tables provide detailed statistics on economic processes and relationships between industries. The SAM is an extension of the I-O table and incorporates institutional and structural details that capture all transfers and real transitions between industries and institutions in an economy. This information enables the user to assess the impact of specified events on economic activity. In this report, the “event” is advertising activity.

The analysis starts with an accounting model that shows the relationship between producing sectors, final demand, and income by industry. Each industry purchases goods and services that are used to produce commodities, which are, in turn, inputs for other industries or purchased by final users. The model accounts for the income originating from each industry as a result of its production. The income is in the form of compensation, taxes on production and imports (less subsidies), and gross operating surplus (profits). The US I-O accounts are derived mainly from the national income and product accounts (NIPA) and the capital flow tables.

IHS Markit sourced data from IMPLAN Group as the initial foundation from which to quantify the economic impact of advertising. The IMPLAN model closely follows the accounting conventions used in the US I-O accounts and is flexible enough to evaluate changes via the value of output or employment from the source industry. Using data from the World Industry Services, World Economic Services and other IHS-proprietary data assets, the modeling environment was customized and refined.

The total economic impacts can be calculated either as direct and indirect effects or as direct, indirect, and induced effects. Direct effects are production changes associated with the immediate or final-demand changes. Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries (for example, additional purchases to produce additional output). Induced

effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects.

The notion of a multiplier rests upon the difference between the initial effect of a change in final demand and the total effects of that change. Two types of multipliers are used to compute the level of impacts:

Type I multipliers

A Type I multiplier is the direct effect produced by a change in final demand plus the indirect effect, divided by the direct effect. Increased demands are assumed to lead to increased employment and population, with the average income level remaining constant. The Leontief inverse (Type I multipliers matrix) is derived by inverting the direct coefficients matrix. The result is a matrix of total requirement coefficients, the amount each industry must produce for the purchasing industry to deliver one dollar's worth of output to final demand.

Type SAM multipliers

Type SAM multipliers incorporate "induced" effects resulting from the household expenditures from new labor income. The linear relationship between labor income and household expenditure can be customized in the IMPLAN software. The default relationship is PCE and total household expenditure. Each dollar of workplace-based income is spent based on the SAM relationship generated by IMPLAN.