

# 2023 ECONOMIC AND FISCAL IMPACT ANALYSIS OF THE UNITED STATES MOVIE THEATRE INDUSTRY



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Commissioned by: National Association of Theatre Owners (NATO)

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# Supplemental Methodology

This supplemental analysis relied on updated national level ticket survey data for Q3-Q4 2023 provided by NATO and their partners. The purpose of the analysis was to “roll-forward” the key input variables; in other words, Beacon re-estimated county level inputs using newly available national level data.

The national level change in box ticket sales between the previous study period (Q3-22 to Q2-23) and the updated study period (Q1-23 to Q4-23) was approximately -4.2%. The difference is primarily driven by a drop-off in Q3-4 2023 ticket sales compared to Q3-4 2022 ticket sales (see figure 1). Total 2023 box office ticket sales were in fact higher than 2022 which is largely driven by above average Q2-2023 performance.

**Figure 1: Change in Receipts from Admission**

	Receipts from Admission 2022 (\$,M)	Receipts from Admission 2022 (\$,M)	% Change from Previous Quarter
Quarter 3	1,550	1,287	-17.0%
Quarter 4	1,204	1,233	2.4%
<b>Total</b>	<b>2,754</b>	<b>2,520</b>	<b>-8.5%</b>

Source: National Association of Theatre Owners, Inc.

To re-estimate county level model input variables, Beacon Economics calculated the quarter-over-quarter change in employment for the sector represented by NAICS code 51213, Motion picture and video exhibition, at the county level.<sup>1</sup> The change in employment was then used to create a weighed distribution of box-office sales by county. Finally, county level numbers were rolled forward by applying the weighted distribution to the change in receipts from admissions. Non-ticket related expenditures were re-calculate using estimates derived from survey data and are validated with data from the most recent U.S. Consumer Expenditure Survey, the U.S. Bureau of Labor Statistics, and PromoCodes.com.

Beacon Economics uses IMPLAN, a state-of-the-art input-output modeling system, to generate the total economic and fiscal impact of movie theatres. This study assumes that any change in spending generates a direct, indirect, and induced effect. The indirect and induced effects are also known as ‘ripple’ or ‘multiplier’ effects, and in combination are referred to as ‘secondary’ impacts. "For each type of impact (direct, indirect, and induced), impacts are measured using three economic indicators: employment, labor income, value added, and output. The initial direct expenditures lead to sequential spending in the respective economy. Together, the direct, indirect, and induced effects add up to the total impact. These impacts were estimated using Industry Contribution Analysis (ICA) modelling types, which is the best way to estimate the value of an industry or group of industries within a certain region at current levels of production. ICA is a unique method

<sup>1</sup> Source: Quarterly Census of Employment and Wages, BLS

which applies a constraint upon the model by removing feedback linkages (buybacks) to the Industry being analyzed, which in this case prevents the overestimation of secondary movie theatre-related impacts.

The direct impact is the additional goods or services generated from immediate spending related to Movie Theatre attendance (i.e., attendees spending money on food, tickets, retail, local transport, etc.). The indirect impact is the subsequent output generated through supply chain, or business-to-business transactions with suppliers of Movie Theatres and other related industries (i.e., restaurants restocking goods due to theatre-goer expenditures, etc.). The induced impact is the spending that will occur through the employees that either receive wages directly from Movie Theatres (or workers in other studied industries) or the subsequent supply chain workers who benefit from the money paid (i.e., spending by the worker's households on rent, goods and services, etc. through direct expenditures). The total economic impact is the combination of direct, indirect, and induced impacts.

The study reports economic impacts using four key economic indicators: employment, labor income, value added, and output.

- Employment represents the number (headcount) of part-time, full-time, and temporary jobs supported through spending associated with expenditures by theatre-goers (i.e., ticket purchases, in-theatre food and beverage, before and/or after social spending (including restaurants, bars, etc.), before and/or after retail spending, and local transportation spending). Jobs “supported” is inclusive of jobs generated and existing jobs that have now been expanded in scope by related spending, which helps keep workers employed.
- Labor Income (reported in 2023 U.S.D) represents the value of all employment income paid through Movie Theatre attendee related spending, including fringe benefits such as health care, etc.
- Value added
- Output (reported in 2023 U.S.D) refers to the total value of production generated through Movie Theatre attendee-related spending, including the value of intermediate inputs – the goods and services used in the production of equipment, raw materials, energy, and other production inputs.

Using IMPLAN's Multi-Regional Input-Output (MRIO) analysis, Beacon Economics estimated the impact that the Movie Theatre industry has on the United States, all 50 States and D.C., and the three most populous counties within each state, when data was available. Non-state U.S. territories like Puerto Rico are not included in this analysis. Each larger region encompassed the impacts from the smaller regions. For example:

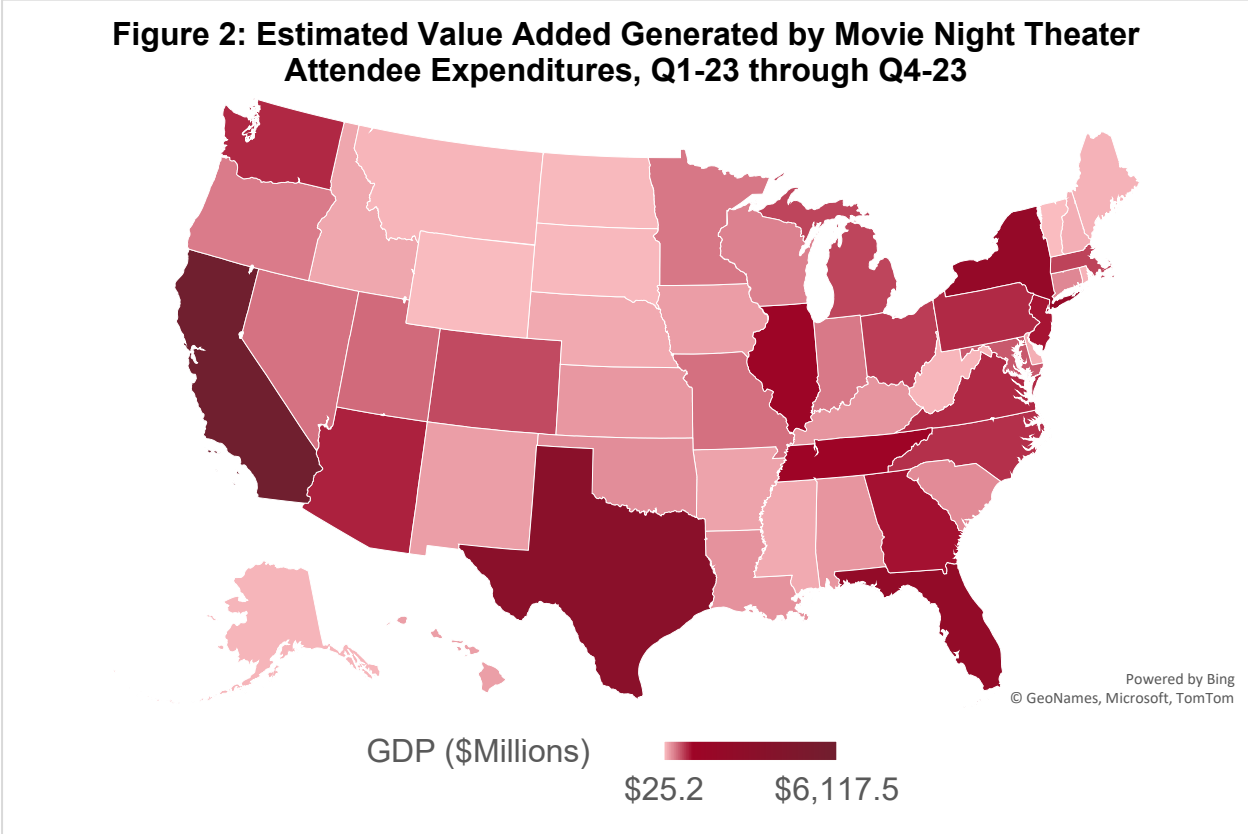
*United States Impacts = Sum of All 50 State-Level Impacts + DC Impacts*

*State of New York Impacts = Kings County Impacts + Queens County Impacts + New York County Impacts + Rest of State of New York Impacts*

For more information on the IMPLAN MRIO modeling system, please see the **Appendix**.

## Subregional Movie Theatre Impact Analysis

The report supplement updates the previously estimated subregion analysis of movie theatre impacts across each state’s top counties by box-office ticket sales as well as state level totals. The GDP contribution (also known as Value Added) of movie theatre attendee spending for full year 2023 in each state is visualized in the following map:



Source: IMPLAN. Analysis by Beacon Economics.

Unsurprisingly, California, which boasts both the most people and the most significant movie economy, leads the nation in value added (also known as GDP) generated by movie theatre attendee expenditures. This report aims to look beyond state-level economies by providing insights into the economic and fiscal impacts of the three largest counties in each state, by population. The following table lists high-level total economic impact figures for those 200+ regions, as estimated using movie attendance and box office receipts data provided by NATO and an overall expenditure and MRIO model developed by Beacon Economics.

**Figure 3: Movie Theatre Attendee Total Impacts by Region  
1Q2023-4Q2023**

Region	Economic Impacts				Fiscal impacts	
	Employment (000s)	Labor Income (Millions)	Value Added (Millions)	Output (Millions)	State and Local (Millions)	Federal (Millions)
<b>Alabama</b>	<b>4,104</b>	<b>\$142.6</b>	<b>\$231.6</b>	<b>\$487.0</b>	<b>\$24.1</b>	<b>\$25.1</b>
Jefferson County	866	\$37.3	\$61.0	\$116.7	\$5.4	\$6.3
Madison County	620	\$20.7	\$33.1	\$70.4	\$3.4	\$3.1
Mobile County	293	\$11.1	\$17.7	\$35.7	\$1.8	\$2.0
Rest Of State	2,325	\$73.5	\$119.8	\$264.0	\$13.6	\$13.9
<b>Alaska</b>	<b>841</b>	<b>\$40.8</b>	<b>\$62.8</b>	<b>\$118.8</b>	<b>\$(1.3)</b>	<b>\$8.5</b>
Anchorage Borough	517	\$26.1	\$40.2	\$75.6	\$(0.7)	\$5.4
Fairbanks North Star Borough	143	\$6.1	\$9.6	\$18.8	\$(0.2)	\$1.3
Matanuska-Susitna Borough	79	\$3.6	\$5.7	\$10.4	\$(0.2)	\$0.8
Rest Of State	102	\$4.9	\$7.3	\$14.0	\$(0.2)	\$1.0
<b>Arizona</b>	<b>11,607</b>	<b>\$530.1</b>	<b>\$848.7</b>	<b>\$1,643.6</b>	<b>\$64.8</b>	<b>\$109.0</b>
Maricopa County	8,482	\$422.9	\$678.0	\$1,272.6	\$49.3	\$86.1
Pima County	1,653	\$63.4	\$99.9	\$208.4	\$8.2	\$13.4
Pinal County	254	\$6.0	\$10.9	\$26.1	\$1.3	\$1.2
Rest Of State	1,218	\$37.7	\$59.9	\$136.5	\$6.0	\$8.3
<b>Arkansas</b>	<b>2,780</b>	<b>\$92.6</b>	<b>\$157.6</b>	<b>\$332.6</b>	<b>\$19.8</b>	<b>\$16.0</b>
Benton County	441	\$14.6	\$25.0	\$51.0	\$2.8	\$2.1
Pulaski County	617	\$27.1	\$45.0	\$86.0	\$4.6	\$4.6
Rest Of State	1,285	\$36.4	\$62.9	\$142.7	\$9.3	\$7.1
Washington County	437	\$14.6	\$24.7	\$52.9	\$3.1	\$2.2
<b>California</b>	<b>60,575</b>	<b>\$3,771.0</b>	<b>\$6,117.5</b>	<b>\$10,117.1</b>	<b>\$581.6</b>	<b>\$807.3</b>
Los Angeles County	18,862	\$1,189.2	\$1,938.9	\$3,051.1	\$174.3	\$257.2
Orange County	6,367	\$339.8	\$543.6	\$952.8	\$51.7	\$69.9
Rest Of State	29,113	\$1,965.6	\$3,185.3	\$5,267.3	\$308.1	\$422.3
San Diego County	6,234	\$276.3	\$449.7	\$845.9	\$47.6	\$57.9
<b>Colorado</b>	<b>8,363</b>	<b>\$387.3</b>	<b>\$627.9</b>	<b>\$1,154.6</b>	<b>\$48.9</b>	<b>\$73.5</b>
Arapahoe County	1,243	\$54.6	\$90.0	\$166.6	\$6.0	\$8.9
Denver County	1,066	\$70.6	\$113.3	\$184.2	\$6.6	\$11.8
El Paso County	1,284	\$46.7	\$77.6	\$157.3	\$6.7	\$9.6
Rest Of State	4,771	\$215.4	\$346.9	\$646.5	\$29.6	\$43.3
<b>Connecticut</b>	<b>3,193</b>	<b>\$188.1</b>	<b>\$306.3</b>	<b>\$512.5</b>	<b>\$31.0</b>	<b>\$37.9</b>
Fairfield County	754	\$55.5	\$89.8	\$133.5	\$7.1	\$11.1
Hartford County	1,137	\$67.0	\$109.3	\$186.7	\$11.1	\$13.4
New Haven County	866	\$43.9	\$71.9	\$129.3	\$8.5	\$9.0

Rest Of State	436	\$21.7	\$35.4	\$63.0	\$4.3	\$4.4
<b>Delaware</b>	<b>1,354</b>	<b>\$58.8</b>	<b>\$91.8</b>	<b>\$174.7</b>	<b>\$1.7</b>	<b>\$12.1</b>
Kent County	54	\$2.1	\$3.3	\$6.7	\$0.1	\$0.4
New Castle County	1,023	\$44.5	\$70.1	\$132.6	\$1.3	\$8.8
Sussex County	277	\$12.2	\$18.4	\$35.4	\$0.2	\$2.9
<b>District Of Columbia</b>	<b>652</b>	<b>\$42.3</b>	<b>\$66.9</b>	<b>\$102.3</b>	<b>\$1.1</b>	<b>\$7.0</b>
District of Columbia	652	\$42.3	\$66.9	\$102.3	\$1.1	\$7.0
<b>Florida</b>	<b>34,244</b>	<b>\$1,375.8</b>	<b>\$2,235.9</b>	<b>\$4,410.6</b>	<b>\$127.6</b>	<b>\$324.4</b>
Broward County	3,548	\$143.2	\$233.8	\$444.0	\$12.2	\$30.8
Miami-Dade County	4,577	\$201.6	\$322.0	\$601.9	\$16.3	\$45.6
Palm Beach County	2,254	\$109.0	\$170.4	\$305.8	\$7.3	\$23.1
Rest Of State	23,865	\$921.9	\$1,509.7	\$3,058.9	\$91.7	\$224.9
<b>Georgia</b>	<b>15,179</b>	<b>\$550.8</b>	<b>\$932.7</b>	<b>\$1,851.4</b>	<b>\$41.1</b>	<b>\$105.7</b>
Cobb County	1,578	\$74.7	\$125.9	\$218.1	\$5.0	\$13.4
Fulton County	2,181	\$139.3	\$230.7	\$368.2	\$6.0	\$23.7
Gwinnett County	2,070	\$69.2	\$117.6	\$241.9	\$4.9	\$12.6
Rest Of State	9,350	\$267.7	\$458.6	\$1,023.2	\$25.2	\$56.0
<b>Hawaii</b>	<b>2,105</b>	<b>\$109.7</b>	<b>\$181.4</b>	<b>\$315.9</b>	<b>\$13.5</b>	<b>\$21.7</b>
Hawaii County	250	\$11.8	\$19.2	\$33.5	\$1.5	\$2.5
Honolulu County	1,659	\$87.5	\$145.5	\$253.1	\$10.8	\$17.0
Kauai County	3	\$0.1	\$0.2	\$0.4	\$0.0	\$0.0
Maui County	193	\$10.3	\$16.4	\$28.9	\$1.2	\$2.2
<b>Idaho</b>	<b>2,314</b>	<b>\$86.5</b>	<b>\$137.9</b>	<b>\$288.2</b>	<b>\$13.4</b>	<b>\$16.8</b>
Ada County	939	\$43.2	\$68.2	\$132.2	\$5.9	\$8.1
Canyon County	309	\$9.8	\$16.0	\$35.7	\$1.8	\$1.9
Kootenai County	230	\$6.2	\$10.4	\$24.0	\$1.1	\$1.3
Rest Of State	836	\$27.4	\$43.3	\$96.3	\$4.5	\$5.5
<b>Illinois</b>	<b>13,243</b>	<b>\$677.3</b>	<b>\$1,107.8</b>	<b>\$1,949.3</b>	<b>\$113.9</b>	<b>\$121.4</b>
Cook County	5,847	\$353.0	\$570.7	\$942.4	\$51.1	\$62.7
DuPage County	1,416	\$77.4	\$124.8	\$219.7	\$12.1	\$12.1
Lake County	1,119	\$51.5	\$84.9	\$158.3	\$8.6	\$8.2
Rest Of State	4,861	\$195.5	\$327.5	\$628.9	\$42.1	\$38.5
<b>Indiana</b>	<b>6,766</b>	<b>\$245.1</b>	<b>\$382.5</b>	<b>\$809.3</b>	<b>\$44.2</b>	<b>\$42.3</b>
Allen County	428	\$16.2	\$24.9	\$52.9	\$3.0	\$2.8
Lake County	429	\$15.1	\$23.1	\$49.7	\$2.6	\$2.6
Marion County	790	\$41.2	\$61.9	\$113.2	\$5.2	\$6.5
Rest Of State	5,119	\$172.7	\$272.7	\$593.5	\$33.5	\$30.4
<b>Iowa</b>	<b>3,371</b>	<b>\$116.9</b>	<b>\$189.0</b>	<b>\$400.2</b>	<b>\$19.9</b>	<b>\$19.9</b>
Linn County	283	\$9.9	\$16.8	\$35.5	\$1.6	\$1.8
Polk County	823	\$35.8	\$57.8	\$110.6	\$4.8	\$5.9

Rest Of State	1,932	\$59.1	\$95.7	\$215.8	\$11.7	\$10.2
Scott County	333	\$12.2	\$18.7	\$38.4	\$1.9	\$2.1
<b>Kansas</b>	<b>3,416</b>	<b>\$135.2</b>	<b>\$219.8</b>	<b>\$442.4</b>	<b>\$24.9</b>	<b>\$23.1</b>
Johnson County	1,240	\$63.1	\$99.5	\$178.6	\$9.6	\$10.4
Rest Of State	1,079	\$30.0	\$51.6	\$122.4	\$7.7	\$4.9
Sedgwick County	850	\$32.9	\$53.4	\$110.3	\$5.9	\$6.1
Shawnee County	247	\$9.2	\$15.3	\$31.1	\$1.7	\$1.7
<b>Kentucky</b>	<b>4,138</b>	<b>\$146.8</b>	<b>\$232.2</b>	<b>\$495.5</b>	<b>\$18.7</b>	<b>\$27.0</b>
Fayette County	604	\$22.0	\$35.2	\$73.6	\$2.7	\$3.7
Jefferson County	1,125	\$53.4	\$82.4	\$156.2	\$5.6	\$9.4
Kenton County	6	\$0.6	\$0.9	\$1.4	\$0.1	\$0.1
Rest Of State	2,403	\$70.9	\$113.7	\$264.2	\$10.4	\$13.9
<b>Louisiana</b>	<b>4,412</b>	<b>\$149.6</b>	<b>\$247.5</b>	<b>\$525.4</b>	<b>\$15.0</b>	<b>\$27.0</b>
East Baton Rouge Parish	666	\$27.4	\$45.0	\$85.2	\$2.4	\$4.4
Jefferson Parish	968	\$35.0	\$57.8	\$118.0	\$3.0	\$6.3
Orleans Parish	157	\$8.7	\$14.7	\$25.2	\$0.8	\$1.4
Rest Of State	2,621	\$78.5	\$130.0	\$297.0	\$8.8	\$14.9
<b>Maine</b>	<b>1,015</b>	<b>\$43.3</b>	<b>\$76.2</b>	<b>\$140.8</b>	<b>\$11.6</b>	<b>\$7.3</b>
Cumberland County	282	\$14.2	\$24.7	\$43.2	\$3.2	\$2.4
Penobscot County	139	\$5.4	\$9.5	\$18.6	\$1.5	\$0.9
Rest Of State	394	\$15.5	\$27.5	\$52.6	\$4.5	\$2.7
York County	200	\$8.3	\$14.5	\$26.5	\$2.4	\$1.3
<b>Maryland</b>	<b>7,565</b>	<b>\$342.3</b>	<b>\$550.5</b>	<b>\$1,017.8</b>	<b>\$61.2</b>	<b>\$59.2</b>
Baltimore County	1,287	\$57.4	\$91.9	\$173.2	\$10.0	\$9.9
Montgomery County	1,552	\$82.4	\$129.7	\$223.8	\$12.3	\$13.7
Prince George	841	\$24.7	\$41.6	\$91.7	\$5.5	\$3.3
Rest Of State	3,886	\$177.8	\$287.2	\$529.1	\$33.5	\$32.3
<b>Massachusetts</b>	<b>7,183</b>	<b>\$440.2</b>	<b>\$668.6</b>	<b>\$1,126.0</b>	<b>\$35.0</b>	<b>\$89.8</b>
Essex County	706	\$38.2	\$56.6	\$103.7	\$3.4	\$8.0
Middlesex County	1,867	\$119.1	\$177.1	\$300.7	\$8.3	\$22.3
Rest Of State	3,990	\$251.8	\$387.4	\$635.5	\$20.4	\$52.7
Worcester County	619	\$31.1	\$47.5	\$86.1	\$3.0	\$6.8
<b>Michigan</b>	<b>10,119</b>	<b>\$425.4</b>	<b>\$657.4</b>	<b>\$1,314.9</b>	<b>\$44.8</b>	<b>\$83.7</b>
Macomb County	1,284	\$44.5	\$67.6	\$143.8	\$4.4	\$8.1
Oakland County	1,669	\$93.2	\$144.5	\$258.0	\$8.0	\$16.9
Rest Of State	5,555	\$211.9	\$329.7	\$696.3	\$25.4	\$44.8
Wayne County	1,611	\$75.7	\$115.4	\$216.8	\$7.0	\$13.9
<b>Minnesota</b>	<b>5,416</b>	<b>\$246.9</b>	<b>\$392.6</b>	<b>\$754.6</b>	<b>\$41.0</b>	<b>\$44.0</b>
Dakota County	635	\$29.4	\$46.1	\$89.7	\$4.6	\$4.9
Hennepin County	1,290	\$75.5	\$122.2	\$209.1	\$10.0	\$12.6

Ramsey County	528	\$26.4	\$42.0	\$76.7	\$3.8	\$3.9
Rest Of State	2,963	\$115.6	\$182.3	\$379.2	\$22.7	\$22.5
<b>Mississippi</b>	<b>2,486</b>	<b>\$69.5</b>	<b>\$121.0</b>	<b>\$276.0</b>	<b>\$14.2</b>	<b>\$12.0</b>
DeSoto County	398	\$9.5	\$16.1	\$39.4	\$2.0	\$1.4
Harrison County	414	\$11.5	\$20.0	\$45.4	\$2.3	\$1.7
Hinds County	16	\$0.8	\$1.5	\$2.6	\$0.1	\$0.1
Rest Of State	1,658	\$47.7	\$83.4	\$188.6	\$9.8	\$8.8
<b>Missouri</b>	<b>6,850</b>	<b>\$268.1</b>	<b>\$428.6</b>	<b>\$876.4</b>	<b>\$35.4</b>	<b>\$48.0</b>
Jackson County	898	\$40.3	\$64.2	\$124.0	\$4.6	\$6.6
Rest Of State	3,510	\$124.1	\$198.7	\$430.9	\$18.4	\$24.1
St. Charles County	924	\$29.4	\$48.9	\$108.5	\$4.7	\$5.0
St. Louis County	1,518	\$74.3	\$116.7	\$212.9	\$7.7	\$12.3
<b>Montana</b>	<b>917</b>	<b>\$40.4</b>	<b>\$61.0</b>	<b>\$120.7</b>	<b>\$1.1</b>	<b>\$9.2</b>
Gallatin County	131	\$7.8	\$11.7	\$20.6	\$0.2	\$1.7
Missoula County	184	\$8.3	\$12.5	\$24.0	\$0.3	\$1.9
Rest Of State	419	\$16.2	\$24.4	\$51.8	\$0.4	\$3.8
Yellowstone County	183	\$8.1	\$12.4	\$24.2	\$0.2	\$1.9
<b>Nebraska</b>	<b>2,042</b>	<b>\$76.7</b>	<b>\$123.5</b>	<b>\$257.6</b>	<b>\$11.0</b>	<b>\$13.0</b>
Douglas County	816	\$38.4	\$61.9	\$117.6	\$4.7	\$6.7
Lancaster County	448	\$15.0	\$24.9	\$54.2	\$2.4	\$2.7
Rest Of State	449	\$11.0	\$17.9	\$45.8	\$2.3	\$1.9
Sarpy County	330	\$12.3	\$18.9	\$39.9	\$1.6	\$1.8
<b>Nevada</b>	<b>4,981</b>	<b>\$225.8</b>	<b>\$416.4</b>	<b>\$739.0</b>	<b>\$56.8</b>	<b>\$44.4</b>
Clark County	3,925	\$183.0	\$337.2	\$592.4	\$45.1	\$36.5
Lyon County	2	\$0.1	\$0.2	\$0.4	\$0.0	\$0.0
Rest Of State	224	\$7.6	\$14.1	\$28.4	\$2.3	\$1.6
Washoe County	829	\$35.1	\$64.9	\$117.8	\$9.4	\$6.3
<b>New Hampshire</b>	<b>1,065</b>	<b>\$64.5</b>	<b>\$97.1</b>	<b>\$164.5</b>	<b>\$1.6</b>	<b>\$13.3</b>
Hillsborough County	214	\$12.9	\$20.0	\$33.0	\$0.4	\$2.7
Merrimack County	245	\$14.1	\$21.4	\$37.6	\$0.3	\$2.9
Rest Of State	200	\$10.4	\$16.1	\$28.7	\$0.3	\$2.4
Rockingham County	406	\$27.1	\$39.7	\$65.2	\$0.5	\$5.4
<b>New Jersey</b>	<b>10,111</b>	<b>\$611.0</b>	<b>\$916.5</b>	<b>\$1,560.1</b>	<b>\$65.0</b>	<b>\$124.8</b>
Bergen County	1,012	\$73.9	\$109.1	\$170.4	\$6.0	\$13.9
Essex County	353	\$20.0	\$31.6	\$55.5	\$2.5	\$3.5
Middlesex County	1,129	\$63.5	\$96.6	\$168.9	\$7.1	\$11.5
Rest Of State	7,617	\$453.6	\$679.2	\$1,165.2	\$49.4	\$95.9
<b>New Mexico</b>	<b>2,548</b>	<b>\$106.5</b>	<b>\$186.2</b>	<b>\$335.5</b>	<b>\$17.5</b>	<b>\$19.1</b>
Bernalillo County	1,370	\$60.2	\$105.1	\$185.7	\$9.6	\$10.5
Dona Ana County	203	\$7.1	\$11.7	\$23.9	\$1.3	\$1.3

Rest Of State	720	\$26.7	\$47.6	\$88.8	\$4.8	\$5.2
Santa Fe County	254	\$12.5	\$21.8	\$37.1	\$1.9	\$2.1
<b>New York</b>	<b>18,187</b>	<b>\$1,244.9</b>	<b>\$2,024.5</b>	<b>\$3,229.2</b>	<b>\$216.8</b>	<b>\$230.3</b>
Kings County	1,728	\$99.9	\$169.3	\$283.2	\$21.8	\$18.3
New York County	2,954	\$377.7	\$588.7	\$787.6	\$40.9	\$55.8
Queens County	1,753	\$95.4	\$155.9	\$271.4	\$20.8	\$16.1
Rest Of State	11,751	\$671.8	\$1,110.6	\$1,887.1	\$133.3	\$140.1
<b>North Carolina</b>	<b>12,099</b>	<b>\$471.6</b>	<b>\$768.3</b>	<b>\$1,520.3</b>	<b>\$46.4</b>	<b>\$94.8</b>
Guilford County	861	\$32.2	\$53.1	\$108.5	\$3.0	\$6.3
Mecklenburg County	1,867	\$101.4	\$160.1	\$276.6	\$8.0	\$18.2
Rest Of State	6,956	\$228.5	\$376.3	\$804.0	\$25.4	\$49.3
Wake County	2,415	\$109.6	\$178.8	\$331.3	\$9.9	\$21.0
<b>North Dakota</b>	<b>646</b>	<b>\$28.9</b>	<b>\$42.2</b>	<b>\$87.3</b>	<b>\$1.5</b>	<b>\$5.5</b>
Burleigh County	152	\$7.1	\$10.3	\$21.1	\$0.5	\$1.4
Cass County	277	\$13.7	\$20.1	\$40.3	\$0.7	\$2.5
Grand Forks County	13	\$0.5	\$0.7	\$1.6	\$(0.0)	\$0.1
Rest Of State	204	\$7.6	\$11.1	\$24.3	\$0.3	\$1.5
<b>Ohio</b>	<b>10,694</b>	<b>\$413.6</b>	<b>\$697.2</b>	<b>\$1,380.9</b>	<b>\$71.1</b>	<b>\$73.3</b>
Cuyahoga County	1,530	\$65.6	\$110.7	\$203.7	\$9.8	\$10.9
Franklin County	1,637	\$67.1	\$115.0	\$214.4	\$10.4	\$10.7
Hamilton County	752	\$37.4	\$62.4	\$110.5	\$4.9	\$6.0
Rest Of State	6,775	\$243.5	\$409.0	\$852.3	\$46.0	\$45.8
<b>Oklahoma</b>	<b>4,793</b>	<b>\$162.2</b>	<b>\$274.9</b>	<b>\$576.7</b>	<b>\$21.5</b>	<b>\$27.3</b>
Cleveland County	732	\$17.3	\$30.6	\$74.0	\$3.0	\$2.7
Oklahoma County	1,427	\$62.1	\$102.1	\$195.0	\$6.6	\$10.0
Rest Of State	1,281	\$32.7	\$58.0	\$137.8	\$6.0	\$5.9
Tulsa County	1,354	\$50.2	\$84.1	\$169.9	\$5.9	\$8.7
<b>Oregon</b>	<b>4,616</b>	<b>\$228.7</b>	<b>\$368.2</b>	<b>\$660.9</b>	<b>\$25.7</b>	<b>\$46.4</b>
Clackamas County	474	\$23.1	\$37.3	\$67.5	\$2.6	\$4.3
Multnomah County	879	\$51.1	\$83.9	\$140.5	\$5.3	\$9.2
Rest Of State	2,240	\$101.0	\$159.9	\$305.1	\$11.9	\$23.1
Washington County	1,023	\$53.6	\$87.1	\$147.8	\$6.0	\$9.8
<b>Pennsylvania</b>	<b>10,406</b>	<b>\$510.1</b>	<b>\$804.5</b>	<b>\$1,467.0</b>	<b>\$72.9</b>	<b>\$95.6</b>
Allegheny County	1,357	\$80.1	\$128.3	\$216.0	\$10.3	\$14.6
Montgomery County	1,358	\$73.1	\$117.6	\$205.0	\$8.8	\$11.8
Philadelphia County	883	\$51.2	\$77.2	\$127.7	\$6.3	\$8.7
Rest Of State	6,808	\$305.6	\$481.4	\$918.3	\$47.5	\$60.5
<b>Rhode Island</b>	<b>879</b>	<b>\$43.3</b>	<b>\$70.7</b>	<b>\$125.0</b>	<b>\$7.3</b>	<b>\$7.9</b>
Kent County	366	\$17.8	\$28.7	\$51.3	\$3.0	\$3.2
Providence County	412	\$20.5	\$33.8	\$59.4	\$3.4	\$3.8

Rest Of State	34	\$1.8	\$2.9	\$5.0	\$0.3	\$0.3
Washington County	67	\$3.2	\$5.2	\$9.3	\$0.6	\$0.5
<b>South Carolina</b>	<b>5,057</b>	<b>\$177.1</b>	<b>\$284.7</b>	<b>\$584.3</b>	<b>\$22.3</b>	<b>\$35.2</b>
Charleston County	533	\$27.4	\$42.8	\$76.3	\$2.9	\$4.8
Greenville County	801	\$30.2	\$48.3	\$97.5	\$3.5	\$5.8
Rest Of State	3,354	\$105.3	\$171.1	\$364.8	\$14.3	\$22.3
Richland County	368	\$14.2	\$22.5	\$45.8	\$1.6	\$2.4
<b>South Dakota</b>	<b>704</b>	<b>\$29.7</b>	<b>\$45.4</b>	<b>\$91.6</b>	<b>\$4.6</b>	<b>\$4.5</b>
Lincoln County	6	\$0.4	\$0.8	\$1.3	\$0.1	\$0.1
Minnehaha County	273	\$14.4	\$21.3	\$39.3	\$1.6	\$2.3
Pennington County	156	\$5.5	\$8.8	\$18.8	\$0.9	\$1.0
Rest Of State	269	\$9.4	\$14.5	\$32.1	\$2.1	\$1.1
<b>Tennessee</b>	<b>8,139</b>	<b>\$661.1</b>	<b>\$1,043.4</b>	<b>\$1,903.9</b>	<b>\$101.1</b>	<b>\$117.5</b>
Davidson County	1,324	\$102.1	\$159.1	\$307.3	\$16.0	\$17.8
Knox County	900	\$69.7	\$115.8	\$212.0	\$11.2	\$12.9
Rest Of State	4,556	\$380.9	\$590.7	\$1,059.5	\$58.2	\$66.9
Shelby County	1,359	\$108.3	\$177.6	\$325.1	\$15.7	\$20.0
<b>Texas</b>	<b>52,505</b>	<b>\$2,009.7</b>	<b>\$3,202.5</b>	<b>\$6,584.3</b>	<b>\$236.6</b>	<b>\$380.2</b>
Dallas County	4,455	\$224.1	\$352.6	\$635.2	\$19.1	\$35.1
Harris County	7,590	\$308.7	\$488.3	\$968.5	\$33.2	\$53.7
Rest Of State	36,225	\$1,316.5	\$2,109.5	\$4,459.0	\$164.3	\$263.8
Tarrant County	4,235	\$160.3	\$252.2	\$521.6	\$20.0	\$27.5
<b>Utah</b>	<b>6,353</b>	<b>\$277.6</b>	<b>\$459.9</b>	<b>\$837.4</b>	<b>\$45.0</b>	<b>\$51.6</b>
Davis County	721	\$31.5	\$52.3	\$87.5	\$5.1	\$5.8
Rest Of State	1,314	\$58.8	\$94.0	\$176.0	\$9.4	\$10.9
Salt Lake County	2,739	\$119.7	\$198.9	\$363.9	\$19.3	\$22.1
Utah County	1,580	\$67.6	\$114.7	\$209.9	\$11.3	\$12.8
<b>Vermont</b>	<b>307</b>	<b>\$15.4</b>	<b>\$25.2</b>	<b>\$45.5</b>	<b>\$2.4</b>	<b>\$2.8</b>
Chittenden County	188	\$10.3	\$16.7	\$29.3	\$1.5	\$1.9
Rest Of State	94	\$4.0	\$6.7	\$12.8	\$0.7	\$0.8
Rutland County	0	\$0.0	\$0.0	\$0.1	\$0.0	\$0.0
Washington County	24	\$1.0	\$1.7	\$3.3	\$0.2	\$0.2
<b>Virginia</b>	<b>11,083</b>	<b>\$484.3</b>	<b>\$805.0</b>	<b>\$1,475.7</b>	<b>\$78.1</b>	<b>\$89.6</b>
Fairfax County	2,002	\$100.4	\$164.9	\$282.9	\$12.7	\$15.4
Prince William County	874	\$34.5	\$55.7	\$104.7	\$6.3	\$5.1
Rest Of State	7,333	\$322.8	\$537.6	\$989.4	\$54.0	\$64.4
Virginia Beach city	875	\$26.6	\$46.8	\$98.7	\$5.1	\$4.7
<b>Washington</b>	<b>10,576</b>	<b>\$448.9</b>	<b>\$811.8</b>	<b>\$1,401.5</b>	<b>\$72.4</b>	<b>\$87.6</b>
King County	4,079	\$183.1	\$321.9	\$554.1	\$28.9	\$34.1
Pierce County	880	\$39.1	\$62.7	\$113.2	\$6.3	\$7.6

Rest Of State	4,388	\$177.8	\$346.0	\$585.7	\$29.3	\$36.8
Snohomish County	1,230	\$48.8	\$81.2	\$148.6	\$7.9	\$9.0
<b>West Virginia</b>	<b>1,140</b>	<b>\$35.2</b>	<b>\$57.9</b>	<b>\$127.8</b>	<b>\$8.8</b>	<b>\$5.8</b>
Berkeley County	44	\$1.1	\$1.9	\$4.4	\$0.3	\$0.2
Kanawha County	229	\$7.1	\$11.5	\$25.3	\$1.6	\$1.1
Monongalia County	149	\$4.7	\$7.6	\$16.4	\$1.1	\$0.6
Rest Of State	719	\$22.3	\$36.9	\$81.7	\$5.8	\$3.9
<b>Wisconsin</b>	<b>4,814</b>	<b>\$192.4</b>	<b>\$338.0</b>	<b>\$663.1</b>	<b>\$49.6</b>	<b>\$32.6</b>
Dane County	667	\$32.6	\$56.7	\$101.3	\$7.5	\$5.3
Milwaukee County	571	\$27.6	\$49.1	\$86.3	\$5.6	\$4.7
Rest Of State	2,800	\$99.7	\$175.5	\$367.6	\$29.5	\$17.5
Waukesha County	776	\$32.5	\$56.7	\$107.9	\$7.1	\$5.1
<b>Wyoming</b>	<b>591</b>	<b>\$21.5</b>	<b>\$32.7</b>	<b>\$70.8</b>	<b>\$2.7</b>	<b>\$4.6</b>
Campbell County	36	\$1.3	\$2.0	\$4.4	\$0.2	\$0.3
Laramie County	135	\$4.4	\$6.9	\$15.7	\$0.6	\$0.9
Natrona County	118	\$4.6	\$6.9	\$14.7	\$0.5	\$1.0
Rest Of State	302	\$11.1	\$16.9	\$36.0	\$1.4	\$2.4
<b>Grand Total</b>	<b>408,541</b>	<b>\$19,263.9</b>	<b>\$31,230.0</b>	<b>\$57,648.9</b>	<b>\$2,687.2</b>	<b>\$3,786.8</b>

Sources: Listed in **Methodology** and **Appendix** of main report. Analysis by Beacon Economics.

## Conclusion

As a nationally significant industry, the movie theatre sector and the many sectors that directly benefit from expenditures tied to attending a movie have massive economic and fiscal impacts. These impacts, which are estimated using the most recent full year of movie theatre data (first quarter 2023 through fourth quarter 2023), hold some limited predictive value for the continued impact of movie theatres throughout America:

### Movie Theatre-Related Attendee Expenditure Impact Estimates:

- Supported over 408,000 total jobs annually.
- Generated \$19.3 billion in labor income.
- Generated \$57.6 billion in economic output.
- Contributed \$2.7 billion in state and local taxes, and \$3.8 billion in federal taxes.
- For every \$1 spent on movie nights, there is an additional \$1.50 in economic activity.

While this report has focused on estimating the economic and fiscal impact of movie theatre attendees, the true impact of movie theatres stretches far beyond the numbers provided in this report. Movies have defined American culture for decades, and helped America become its current self politically, socially, and economically. Future studies may

consider the massive role the movie industry has played in shaping culture across America and across the globe.

## Appendix

### Multi-Regional Input-Output Methodology & IMPLAN

This report is based on an economic analysis technique known as Multi-Regional Input-Output (MRIO) analysis, which examines inter-industry relationships across several regions. A MRIO analysis builds off the standard Input-Output (I-O) analysis by expanding effects from monetary market transactions beyond a single region. It also helps capture leakages in other regions. In a MRIO analysis, the *direct* effect in one region triggers *indirect* and *induced* effects in other regions. The results of the analysis reveal the effects of a change in one or several economic activities on an entire economy, along with the economic interdependence of regions.

IMPLAN expands on the traditional I-O approach to include transactions among industries and institutions, and within institutions themselves, thereby capturing all monetary market transactions in a given period. This specific report uses the IMPLAN web model. For more information on the IMPLAN modeling process, visit [IMPLAN.com](http://IMPLAN.com).

Although IMPLAN provides an excellent framework for conducting impact analysis, Beacon Economics takes extra precautions to ensure model results are valid, employing decades of experience to tailor the model to the unique demands of each economic impact analysis the firm conducts. Procedures and assumptions are thoroughly and systematically inspected for validity and individual project appropriateness before any analysis is performed.

## Glossary of Key Terms

Term	Definition
<b>Direct Effect</b>	<p>The output of goods or services generated immediately by Movie Theatre-related attendee expenditures.</p> <p>Example: A movie theatre attendee spends \$10 on their ticket, \$10 on popcorn, \$10 at a local restaurant, \$10 at a local store, and \$10 on transport to and from the theatre, which in total generates a Direct Effect of \$50 of Output (simplified scenario assumes no retail overhead cost).</p>
<b>Indirect Effect</b>	<p>The additional output of goods or services generated from the first level movie-theatre related supply chain and business-to-business transactions.</p> <p>Example: business receiving movie attendee revenue buys supplies from another business within the studied region.</p>
<b>Induced Effect</b>	<p>The additional Output of goods or services generated as the employees of businesses from the direct and indirect effects spend their labor incomes at other businesses.</p>

	<p>Example: A business that receives expenditures from a movie theatre attendee pays a worker \$100 because of a \$200 increase in revenue due to the direct or indirect effects. That worker then spends their new Labor Income at another local business, generating additional an additional Induced Effect.</p>
<b>Secondary Effects</b>	Sum of the indirect and induced effects.
<b>Total Impact</b>	The sum of the direct, indirect, and induced effects.
<b>Employment</b>	The number of jobs supported through spending by movie theatre-related expenditures, including full time, part time, and seasonal workers.
<b>Labor Income</b>	The value of all forms of employment income paid through movie theatre trip-related spending, including health care, retirement, and other employee benefits.
<b>Output</b>	The total value of production generated through spending related to movie theatre attendance, including the value of intermediate inputs - the goods and services used in the production of equipment, raw materials, energy, and other production inputs. Total output (sum of direct, indirect, and induced output) is often referred to also as Total Economic Impact. Direct Output is equivalent to gross spending minus overhead cost.
<b>Value Added</b>	Contribution to GDP (or GSP, in the case of a state) of movie-theatre related expenditures, which is equal to output minus the value of intermediate inputs. Value Added represents the total market value of final goods and services produced and is also equivalent to Final Demand.
<b>Tax Revenue</b>	Money collected to support federal, state, and/or local governments as a result of movie theatre-related expenditures.

## About Beacon Economics

Founded in 2007, Beacon Economics is an independent research and consulting firm dedicated to delivering accurate, insightful, and objectively based economic analysis. Beacon is a certified small business in the state of California. The firm employs unique proprietary models, vast databases, and sophisticated data processing across the company's specialized practice areas. Beacon Economics equips its clients with the data and analysis they need to understand the significance of on-the-ground realities and make informed business and policy decisions.

### Practice Areas

- Economic, Fiscal, and Social Impact Analysis
- Public Policy Analysis
- Regional and Sub-Regional Analysis
- Economic and Revenue Forecasting
- Housing, Land Use, and Real Estate Advisory
- Community and Economic Development
- Litigation Support and Expert Testimony

### Expertise in Economic Impact Analysis

Since 2011, Beacon Economics has conducted dozens of comprehensive analyses that have provided reliable and quantifiable data on the economic impact of various industries and organizations, including the economic impact of business and visitor expenditures. Impact analyses evaluate major economic impacts associated with relevant entities (in this case, entities related to theatre expenditures across the United States and its many subregions) and their fiscal impact on national, state, and local governments. By combining sampling methods, financial data, surveys, and other available economic resources with current frameworks for studying economic impacts, Beacon Economics estimates the amount of economic activity generated in the local and broader economy by calculating the spending of entities and other participants in the affected region.

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