



2020  
U.S. EDITION

# Economic Impacts of Commercial Real Estate

**Stephen S. Fuller, PhD**

Dwight Schar Faculty Chair and University Professor  
Director, Stephen S. Fuller Institute,  
Schar School of Policy and Government  
George Mason University | Arlington, Virginia

*Produced in conjunction with*

**DODGE**  
DATA & ANALYTICS

**NAIOP** | RESEARCH  
FOUNDATION

# Appendix F: Operating Impacts by State

**Appendix F-1:** Impacts of Operations on State Economies (**Office**), 2019

State	Direct Spending (In Billions of Dollars)	Total Output (In Billions of Dollars)	Personal Earnings (In Billions of Dollars)	Jobs Supported
Alabama	\$5,790	\$10,899	\$3,677	135
Alaska	1,162	1,877	656	23
Arizona	29,368	57,725	20,017	635
Arkansas	9,598	17,119	5,767	212
California	110,333	226,127	77,078	2,209
Colorado	23,607	48,160	16,624	499
Connecticut	4,626	8,319	2,692	81
Delaware	778	1,287	364	12
District of Columbia	29,520	36,132	3,737	133
Florida	82,956	163,880	56,850	1,985
Georgia	67,278	144,856	48,171	1,611
Hawaii	2,326	4,132	1,439	45
Idaho	10,498	18,060	6,285	237
Illinois	31,292	68,573	22,227	632
Indiana	15,680	31,248	10,174	324
Iowa	40,708	69,504	22,992	832
Kansas	9,862	18,341	5,516	178
Kentucky	8,998	17,150	5,337	183
Louisiana	9,340	17,329	5,882	213
Maine	159	279	96	3
Maryland	27,014	49,311	15,676	488
Massachusetts	128,579	237,435	77,636	2,271
Michigan	11,836	23,777	8,107	259
Minnesota	23,184	46,191	15,494	471
Mississippi	1,022	1,801	595	22
Missouri	5,582	10,922	3,408	118
Montana	1,412	2,337	826	31
Nebraska	22,090	38,415	12,903	462
Nevada	2,895	5,012	1,713	61
New Hampshire	1,220	2,152	669	20
New Jersey	24,409	49,263	15,314	444
New Mexico	3,851	6,432	2,232	85
New York	82,529	146,374	45,729	1,359
North Carolina	26,486	54,453	18,095	632
North Dakota	2,005	3,219	1,031	34
Ohio	42,602	89,345	29,191	906
Oklahoma	5,627	10,676	3,652	131
Oregon	19,063	35,568	11,836	362
Pennsylvania	39,328	80,449	25,953	770
Rhode Island	1,689	2,867	863	27
South Carolina	13,248	26,283	8,597	311
South Dakota	2,308	3,675	1,231	46
Tennessee	45,884	97,980	31,710	977
Texas	213,104	479,612	160,446	5,209
Utah	9,375	19,134	6,508	227
Vermont	662	1,082	361	13
Virginia	70,091	130,671	41,354	1,259
Washington	52,332	98,060	33,189	997
West Virginia	149	242	76	3
Wisconsin	8,905	16,860	5,669	190
Wyoming	381	579	195	7
<b>State Totals</b>	<b>\$1,382,739</b>	<b>\$2,731,174</b>	<b>\$895,840</b>	<b>28,373</b>
<b>Interstate Spillovers</b>		<b>977,332</b>	<b>316,823</b>	<b>7,170</b>
<b>U.S. Totals</b>	<b>\$1,382,739</b>	<b>\$3,708,506</b>	<b>\$1,212,662</b>	<b>35,544</b>

Source: GMU Schar School of Policy and Government, The Stephen S. Fuller Institute; Dodge Data & Analytics; BEA; NAIOP

Note: Appendices include data for the District of Columbia, resulting in 51 states.

## Appendix F-2: Impacts of Operations on State Economies (**Industrial**), 2019

State	Direct Spending (In Billions of Dollars)	Total Output (In Billions of Dollars)	Personal Earnings (In Billions of Dollars)	Jobs Supported
Alabama	\$9,352	\$17,605	\$5,939	217
Alaska	–	–	–	0
Arizona	2,344	4,607	1,597	51
Arkansas	3,151	5,620	1,893	70
California	1,029	2,109	719	21
Colorado	757	1,544	533	16
Connecticut	434	781	253	8
Delaware	–	–	–	0
District of Columbia	–	–	–	0
Florida	2,152	4,251	1,475	51
Georgia	4,631	9,972	3,316	111
Hawaii	–	–	–	0
Idaho	355	611	213	8
Illinois	2,933	6,428	2,084	59
Indiana	4,530	9,028	2,940	94
Iowa	1,624	2,773	917	33
Kansas	568	1,055	317	10
Kentucky	2,286	4,358	1,356	47
Louisiana	26	49	17	1
Maine	35	62	21	1
Maryland	455	831	264	8
Massachusetts	1,298	2,397	784	23
Michigan	6,614	13,287	4,530	145
Minnesota	2,980	5,938	1,992	60
Mississippi	206	363	120	4
Missouri	2,501	4,893	1,527	53
Montana	–	–	–	0
Nebraska	970	1,687	567	20
Nevada	737	1,277	436	15
New Hampshire	257	454	141	4
New Jersey	799	1,613	502	15
New Mexico	71	119	41	2
New York	3,446	6,113	1,910	57
North Carolina	2,664	5,476	1,820	64
North Dakota	37	59	19	1
Ohio	3,119	6,541	2,137	66
Oklahoma	146	276	95	3
Oregon	551	1,028	342	10
Pennsylvania	1,207	2,468	796	24
Rhode Island	132	224	67	2
South Carolina	879	1,743	570	21
South Dakota	117	187	63	2
Tennessee	2,154	4,600	1,489	46
Texas	7,165	16,126	5,395	175
Utah	417	851	290	10
Vermont	12	20	7	0
Virginia	653	1,218	385	12
Washington	1,404	2,631	890	27
West Virginia	79	129	41	1
Wisconsin	4,993	9,453	3,178	107
Wyoming	59	90	30	1
<b>State Totals</b>	<b>\$82,333</b>	<b>\$162,944</b>	<b>\$54,016</b>	<b>1,775</b>
<b>Interstate Spillovers</b>		<b>57,872</b>	<b>18,190</b>	<b>341</b>
<b>U.S. Totals</b>	<b>\$82,333</b>	<b>\$220,816</b>	<b>\$72,206</b>	<b>2,116</b>

Source: GMU Schar School of Policy and Government, The Stephen S. Fuller Institute; Dodge Data & Analytics; BEA; NAIOP

Note: Appendices include data for the District of Columbia, resulting in 51 states.

### Appendix F-3: Impacts of Operations on State Economies (Warehouse), 2019

State	Direct Spending (In Billions of Dollars)	Total Output (In Billions of Dollars)	Personal Earnings (In Billions of Dollars)	Jobs Supported
Alabama	\$1,105	\$2,080	\$702	26
Alaska	–	–	–	0
Arizona	7,602	14,943	5,182	164
Arkansas	297	529	178	7
California	26,673	54,665	18,633	534
Colorado	4,613	9,411	3,248	97
Connecticut	481	866	280	8
Delaware	587	971	274	9
District of Columbia	298	365	38	1
Florida	29,924	59,114	20,507	716
Georgia	21,494	46,279	15,390	515
Hawaii	217	385	134	4
Idaho	296	509	177	7
Illinois	9,899	21,693	7,032	200
Indiana	12,263	24,439	7,957	253
Iowa	958	1,636	541	20
Kansas	1,162	2,162	650	21
Kentucky	13,098	24,965	7,769	267
Louisiana	1,355	2,513	853	31
Maine	103	181	62	2
Maryland	7,855	14,338	4,558	142
Massachusetts	3,520	6,501	2,126	62
Michigan	1,119	2,248	766	24
Minnesota	3,488	6,949	2,331	71
Mississippi	2,178	3,839	1,267	47
Missouri	4,012	7,850	2,449	85
Montana	184	305	108	4
Nebraska	681	1,185	398	14
Nevada	5,732	9,923	3,391	120
New Hampshire	131	231	72	2
New Jersey	14,173	28,603	8,892	258
New Mexico	476	795	276	10
New York	8,772	15,558	4,861	144
North Carolina	9,175	18,864	6,269	219
North Dakota	956	1,535	491	16
Ohio	15,726	32,980	10,775	335
Oklahoma	402	763	261	9
Oregon	3,214	5,996	1,995	61
Pennsylvania	13,221	27,045	8,725	259
Rhode Island	758	1,286	387	12
South Carolina	3,446	6,836	2,236	81
South Dakota	498	792	265	10
Tennessee	4,283	9,146	2,960	91
Texas	37,517	84,437	28,247	917
Utah	1,947	3,974	1,352	47
Vermont	254	415	139	5
Virginia	3,910	7,289	2,307	70
Washington	8,222	15,406	5,214	157
West Virginia	35	57	18	1
Wisconsin	8,047	15,235	5,123	172
Wyoming	139	210	71	3
<b>State Totals</b>	<b>\$296,494</b>	<b>\$598,298</b>	<b>\$197,937</b>	<b>6,331</b>
<b>Interstate Spillovers</b>		<b>196,900</b>	<b>62,088</b>	<b>1,290</b>
<b>U.S. Totals</b>	<b>\$296,494</b>	<b>\$795,197</b>	<b>\$260,025</b>	<b>7,621</b>

Source: GMU Schar School of Policy and Government, The Stephen S. Fuller Institute; Dodge Data & Analytics; BEA; NAIOP

Note: Appendices include data for the District of Columbia, resulting in 51 states.

**Appendix F-4: Impacts of Operations on State Economies (Retail and Entertainment), 2019**

State	Direct Spending (In Billions of Dollars)	Total Output (In Billions of Dollars)	Personal Earnings (In Billions of Dollars)	Jobs Supported
Alabama	\$8,281	\$15,588	\$5,258	192
Alaska	1,204	1,946	681	24
Arizona	5,460	10,731	3,721	118
Arkansas	1,669	2,977	1,003	37
California	13,007	26,659	9,087	260
Colorado	6,085	12,413	4,285	129
Connecticut	1,521	2,736	885	27
Delaware	590	977	276	9
District of Columbia	1,513	1,852	192	7
Florida	31,653	62,530	21,692	757
Georgia	9,938	21,399	7,116	238
Hawaii	1,470	2,612	910	28
Idaho	609	1,047	364	14
Illinois	5,634	12,347	4,002	114
Indiana	5,792	11,543	3,759	120
Iowa	5,570	9,510	3,146	114
Kansas	4,530	8,425	2,534	82
Kentucky	3,575	6,814	2,120	73
Louisiana	2,444	4,534	1,539	56
Maine	680	1,191	411	15
Maryland	6,272	11,448	3,639	113
Massachusetts	3,624	6,693	2,188	64
Michigan	6,855	13,772	4,696	150
Minnesota	3,686	7,345	2,464	75
Mississippi	1,894	3,339	1,102	41
Missouri	4,107	8,036	2,507	87
Montana	231	382	135	5
Nebraska	1,177	2,046	687	25
Nevada	1,423	2,463	842	30
New Hampshire	646	1,139	354	11
New Jersey	5,679	11,462	3,563	103
New Mexico	1,056	1,763	612	23
New York	9,505	16,857	5,266	156
North Carolina	9,102	18,713	6,218	217
North Dakota	1,072	1,720	551	18
Ohio	15,021	31,503	10,293	320
Oklahoma	2,274	4,314	1,476	53
Oregon	1,540	2,873	956	29
Pennsylvania	5,923	12,116	3,909	116
Rhode Island	1,411	2,394	721	23
South Carolina	3,278	6,504	2,127	77
South Dakota	954	1,519	509	19
Tennessee	4,932	10,532	3,409	105
Texas	34,695	78,085	26,122	848
Utah	1,840	3,755	1,277	45
Vermont	90	146	49	2
Virginia	8,236	15,354	4,859	148
Washington	2,983	5,590	1,892	57
West Virginia	1,638	2,668	840	29
Wisconsin	3,745	7,089	2,384	80
Wyoming	181	275	93	3
<b>State Totals</b>	<b>\$256,295</b>	<b>\$509,728</b>	<b>\$168,720</b>	<b>5,484</b>
<b>Interstate Spillovers</b>		<b>177,656</b>	<b>56,051</b>	<b>1,104</b>
<b>U.S. Totals</b>	<b>\$256,295</b>	<b>\$687,383</b>	<b>\$224,771</b>	<b>6,588</b>

Source: GMU Schar School of Policy and Government, The Stephen S. Fuller Institute; Dodge Data & Analytics; BEA; NAIOP

Note: Appendices include data for the District of Columbia, resulting in 51 states.

## Appendix F-5: Impacts of Operations on State Economies (in Four Categories), 2019

State	Direct Spending (In Billions of Dollars)	Total Output (In Billions of Dollars)	Personal Earnings (In Billions of Dollars)	Jobs Supported
Alabama	\$24,528	\$46,172	\$15,575	570
Alaska	2,366	3,823	1,337	47
Arizona	44,773	88,006	30,517	969
Arkansas	14,715	26,245	8,841	325
California	151,042	309,560	105,518	3,024
Colorado	35,061	71,528	24,690	741
Connecticut	7,063	12,703	4,111	123
Delaware	1,954	3,234	914	31
District of Columbia	31,331	38,349	3,967	141
Florida	146,685	289,776	100,523	3,509
Georgia	103,342	222,505	73,993	2,474
Hawaii	4,013	7,129	2,483	77
Idaho	11,758	20,227	7,039	266
Illinois	49,759	109,041	35,344	1,004
Indiana	38,265	76,258	24,830	791
Iowa	48,860	83,424	27,596	999
Kansas	16,122	29,983	9,017	291
Kentucky	27,958	53,287	16,582	569
Louisiana	13,164	24,425	8,291	300
Maine	979	1,713	591	21
Maryland	41,596	75,929	24,138	751
Massachusetts	137,022	253,025	82,734	2,420
Michigan	26,424	53,082	18,100	578
Minnesota	33,338	66,423	22,280	677
Mississippi	5,299	9,342	3,084	115
Missouri	16,201	31,701	9,890	342
Montana	1,827	3,024	1,068	41
Nebraska	24,918	43,333	14,555	521
Nevada	10,787	18,675	6,382	226
New Hampshire	2,254	3,975	1,236	37
New Jersey	45,060	90,941	28,271	819
New Mexico	5,454	9,109	3,161	120
New York	104,252	184,902	57,766	1,716
North Carolina	47,427	97,505	32,402	1,131
North Dakota	4,070	6,534	2,092	69
Ohio	76,468	160,369	52,396	1,627
Oklahoma	8,450	16,030	5,483	197
Oregon	24,367	45,464	15,129	463
Pennsylvania	59,679	122,079	39,382	1,168
Rhode Island	3,990	6,771	2,038	65
South Carolina	20,851	41,366	13,530	489
South Dakota	3,877	6,173	2,067	78
Tennessee	57,253	122,259	39,568	1,219
Texas	292,482	658,260	220,210	7,149
Utah	13,579	27,714	9,426	329
Vermont	1,017	1,663	555	21
Virginia	82,890	154,533	48,905	1,489
Washington	64,941	121,687	41,186	1,237
West Virginia	1,901	3,096	975	34
Wisconsin	25,690	48,637	16,354	548
Wyoming	760	1,155	390	15
<b>State Totals</b>	<b>\$2,017,861</b>	<b>\$ 4,002,144</b>	<b>\$1,316,513</b>	<b>41,963</b>
<b>Interstate Spillovers</b>		<b>1,409,759</b>	<b>453,151</b>	<b>9,906</b>
<b>U.S. Totals</b>	<b>\$2,017,861</b>	<b>\$5,411,903</b>	<b>\$1,769,664</b>	<b>51,870</b>

Source: GMU Schar School of Policy and Government, The Stephen S. Fuller Institute; Dodge Data & Analytics; BEA; NAIOP

Note: Appendices include data for the District of Columbia, resulting in 51 states.

The logo for NAIOP Research Foundation. It features the word "NAIOP" in a large, bold, white sans-serif font. To its right is a vertical white line, followed by the words "RESEARCH" and "FOUNDATION" stacked vertically in a smaller, white sans-serif font.

**NAIOP** | RESEARCH  
FOUNDATION

**We're Shaping the Future**

2355 Dulles Corner Boulevard, Suite 750  
Herndon, VA 20171-3034

703-904-7100  
[naiop.org/research](http://naiop.org/research)