

Humana

THE ECONOMIC IMPACT OF THE HUMANA CORPORATION AND HUMANA PHILANTHROPY ON THE COMMONWEALTH OF KENTUCKY AND THE LOUISVILLE METRO AREA

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Headquartered in Louisville, Kentucky, Humana Inc. is a leading (2022 Fortune #40 ranking) health and wellbeing company focused on making it easy for people to achieve their best health with clinical excellence through coordinated care. The company's strategy integrates care delivery, the member experience, and clinical and consumer insights to encourage engagement, behavior change, proactive clinical outreach and wellness for the customers they serve across the country. Humana provides many economic and philanthropic benefits to the Commonwealth of Kentucky and to the Louisville Metro area. This research study is based primarily on six years of Humana's financial data and shows significant economic and philanthropic impacts on the Commonwealth of Kentucky.

Humana Inc. was founded in 1961 when attorneys David Jones and Wendell Cherry created Extendicare, a nursing home in Louisville, Kentucky that eventually evolved into Humana. The company has transformed over the years to support the nation's ever-changing healthcare landscape. In the 1970s, Extendicare changed its name to Humana and expanded into a hospital company. It grew to the nation's largest hospital company in the 1980s and also began its health insurance business. In the 1990s, the hospital business was spun off, and the health insurance business retained the Humana name. The company again transformed in the 2000s when it heavily invested in the Medicare Advantage and Medicare Prescription Drug Plan programs. As the Medicare business grew, the company significantly expanded its healthcare-delivery businesses. As of December 31, 2022, Humana had approximately 17.1 million members enrolled in medical benefit plans, as well as approximately 5.2 million members in their specialty products, through its Medicare, Medicaid, TRICARE (military health coverage), Employer Group, Specialty Benefits, and Health Care Services business known as CenterWell. As of 2023, the corporation ranks within the top 100 of the Fortune 500 list. Its nationwide 2022 total national revenues before expenses and taxes were around \$93 billion, and Kentucky revenues were around \$4.5 billion, a significant portion of the Kentucky's estimated Gross Domestic Product of around \$260 billion for 2022.

BRIEF BACKGROUND INFORMATION

At the national level, and as shown in the table below, Humana is part of a group of over a dozen insurance firms which collectively account for a little over 60% of the health insurance premiums collected in 2022 (Insurance Information Institute 2022). Humana has several very large and powerful competitors. At the same time, the US government through its various health care programs such as Medicare, Medicaid, military provided insurance, etc., pays approximately over half of all health insurance bills in the nation.

As of the time of the writing of this report, the US national economy has a low unemployment rate of around 3.9% but has been suffering the effects of a bad inflationary period going back to early 2022 (US Bureau of Labor Statistics 2023). The bad inflation over the last two years has increased the cost of production/services for many US firms and could affect consumer disposable personal income negatively enough to cause

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PERCENTAGE MARKET SHARE OF LEADING US HEALTH INSURANCE COMPANIES 2021, BY DIRECT PREMIUMS

UnitedHealth Group Inc.	15.30
Anthem Inc.	10.30
Centene Corp.	9.10
Humana Inc.	8.80
HealthCare Services Corp.	5.10
CVS Health Corp.	3.60
GuideWell Mutual Holding Corp.	2.70
Molina Healthcare Inc.	2.70
Independence Health Group Inc.	2.60
Kaiser Permanente	2.60
TOTAL	62.50

consumer spending to fall low enough to trigger a national recession, something that some economists have been predicting this year. Nevertheless, job growth throughout the nation has remained strong through the end of October 2023 (US Bureau of Labor Statistics 2023). Meanwhile, the Kentucky economy is also enjoying a low unemployment rate of around 4.0% with strong and steady demand for workers. However, the recruiting efforts of most employers, including Humana, in the Commonwealth have been challenging for the last two years because Kentucky has one of the lowest labor force participation rates in the nation at around 57%. Only six states have lower rates than Kentucky. The rest of the US has a rate of around 62 to 63% and has had higher rates dating back to before the Great Recession (around 66 to 67%). The drop in labor force participation has been fueled by a large retirement wave of baby boomers over the last 10 years or so, younger people staying in school longer and opting to postpone work commitments, and declining labor force participation rates among women. The last factor is attributed to high daycare costs which give incentives for many parents to stay home and not work in order to care for children. In Kentucky, these reasons for lower labor participation rates are exacerbated by an unusually high portion of the adult population that is on disability or suffering chronic illnesses. For the foreseeable future, there does not appear to be many changes on the horizon in the state regarding labor force participation rates.

HUMANA EMPLOYMENT, PAYROLL, AND OUTPUT EFFECTS

For Kentucky alone, Humana's total revenues or "output" has multiple effects around the Commonwealth. As Table 1 shows, and in using an estimate of around 11,000 employees statewide for Humana (a "direct" impact), we see that these employees supported around another 34,000 jobs in Kentucky among the firm's suppliers and vendors (stationery suppliers, computer vendors, etc.).2 These are "indirect" impacts. The spending of Humana employees on clothing, housing, and other items along with the spending of the employees of its vendors on these items in turn support around 17,000 jobs in retailing, housing construction, and entertainment in the state. These are "induced" impacts. Therefore, each job of Humana supports almost 5 other jobs in the state thanks to an employment "multiplier effect" of around 5.67. Humana's 11,000 jobs support around 51,000 other jobs in the Commonwealth.

² This report uses the economic modeling system called IMPLAN which stands for "input-output modeling and planning", and IMPLAN is produced and serviced by the IMPLAN Corporation of North Carolina (IMPLAN 2023). Input-output analysis is performed by IMPLAN, and input-output analysis shows the linkages among different industries within a region of a nation and is useful in pinpointing the economic impact of different businesses in an area.

TABLE 1

IMPACT	EMPLOYMENT	PAYROLL/LABOR INCOME	REVENUES/OUTPUT
1 - Direct	11,000	\$ 1.009,329,757	\$ 4,500,000,000
2 - Indirect	34,226	\$ 2,028,042,660	\$ 6,263,434,596
3 - Induced	17,113	\$ 1,014,021,330	\$ 3,131,717,298
TOTAL	62,339	\$ 4,051,393,747	\$ 13,895,151,894
MULTIPLIERS	5.67	4.01	3.09

Next, the payroll of Humana also has multiple effects throughout the state's economy. Of the approximate \$1 billion in payroll that Humana has for its Kentucky employees, an approximate \$2 billion in additional payroll is created by Humana's vendors and contractors (\$2.028 billion) as well as by businesses who sell to Humana workers and its vendors' employees (\$1.014 billion). Therefore, each dollar in payroll that Humana provides its employees generates another \$3.01 for other workers throughout the Commonwealth as shown by the multiplier of 4.01.

When it comes to state Gross Domestic Product, Humana produces around \$4.5 billion for Kentucky3, which in turn helps its suppliers generate another \$6.2 billion in revenues (indirect effects) and supports another \$3.1 billion in spending among different businesses (induced effects). For every dollar that Humana produces, state output goes up by another \$2.09 per the multiplier value of 3.09. **Annually and on average, of the \$6.2 billion that Humana operations help to generate among its supply chain, an estimated \$23 million of this is spent with local minority-, veteran-, and woman-owned enterprises which in turn helps them provide hundreds of jobs and further spending in the regional economy.**

THE SIGNIFICANCE OF MEDICAID TO HUMANA AND KENTUCKY

In Kentucky, Humana is currently one of six managed care organizations (MCOs) that contract with the Commonwealth of Kentucky to manage Medicaid benefits for enrollees. Because Humana's operations are based in Kentucky, should the company gain a greater market share over its competitors, more of the state's budgeted Medicaid dollars would stay in the state, increasing economic opportunities and economic impact multiplier effects. Humana would need to hire additional in-state employees and would spend more vendor dollars in Kentucky. Most notably, more tax revenue would be generated for the state than if those same Medicaid dollars were spent with a managed care organization that staffs out of state employees. It is estimated that an additional \$100M+ of Medicaid program funds can be retained within Kentucky annually if Humana served one-third of program enrollees. For every 10,000 additional enrollees added to a Kentucky-headquartered MCO, an additional \$4M in program funding can be retained within the Commonwealth.

³ The average of total revenues over the last several years or so. Many vendors and suppliers are minority, veteran or female owned and managed.

Today, nearly \$600M annually in program funding is estimated to flow out of Kentucky. All of this would in turn increase the induced effects of dollars being spent in Kentucky.

Given the revenue/output multiplier shown in Table 1, the overall impact of the increase in Medicaid market share could lead to an additional \$2.09 billion in indirect and induced revenue effects throughout the state if Humana is permitted a greater share – or one third - of the Medicaid market in the state. Many states often favor their locally headquartered businesses, so an increase in such additional revenue would not be unusual.

Table 2 indicates the Top 15 industries affected and supported by Humana employment and payroll. Many jobs supported by Humana employment typically are those in certain professions such as physicians, hospitals, real estate, legal, brokerage services, and accounting services, and these are often high paying jobs. These jobs also typically enable workers to enjoy better health outcomes, have a lower probability of disability, and a longer life expectancy than workers in other fields (Ravesteijn, van Kippersluis, van Doorslaer 2013). These jobs constitute the bulk of those estimated in Table 1.

Industry	Direct Impact Employment	Indirect Impact Employment	Induced Impact Employment	Total Impact Employment
Insurance carriers, except direct life	11,000	1,707	90	12,797
Insurance agencies, brokerages, and related activities	0	9,874	84	9,958
Other real estate	0	1,543	324	1,867
Full-service restaurants	0	468	629	1,097
Accounting, tax preparation, bookkeeping, and payroll services	0	731	79	810
Limited-service restaurants	0	165	635	800
Legal services	0	657	88	745
Hospitals	0	8,474	2,118	10,592
Employment services	0	420	285	705
Offices of physicians	0	3,936	984	4,920
Securities and commodity contracts intermediation and brokerage	0	350	111	461
Monetary authorities and depository credit intermediation	0	247	180	427
Retail - General merchandise stores	0	5	385	390
Services to buildings	0	243	80	323
Retail - Food and beverage stores	0	2	315	317
TOTAL	11,000	28,822	6,387	46,209

In looking at how Humana affects the economy of the Louisville Metro area (Jefferson, Oldham, Bullitt, Shelby, Nelson, Hardin, Henry, Spencer, Meade, and Trimble counties in Kentucky and Clark, Floyd, and Harrison counties in Indiana), Table 3 shows similar results to those of Table 1, although the approximate direct employment number for Humana used is for its corporate headquarters in Louisville-Jefferson County. As demonstrated in the table, Louisville metro area output and payroll comprises the bulk of the estimates for the state of Kentucky thanks to Humana having its principal offices in Louisville.

TABLE 3

IMPACT	EMPLOYMENT	PAYROLL/LABOR INCOME	REVENUES/OUTPUT
1 - Direct	9,000	\$ 893,874,099	\$ 3,681,818,182
2 - Indirect	24,003	\$ 1,422,284,461.17	\$ 4,392,602,717.46
3 - Induced	12,001	\$ 711,112,603.36	\$ 2,196,209,857.61
TOTAL	45,004	\$ 3,027,271,164	\$10,270,630,757
MULTIPLIERS	5.00	3.39	2.79

TAX IMPACTS OF HUMANA

Table 4 displays the estimated tax impacts for Humana at the local, state, and federal levels for Kentucky. These include taxes on business operations and payroll taxes, including social security taxes, Medicare taxes, property taxes paid by employees, sales taxes and various fees paid by the companies and their employees. County estimates are across counties in the state of Kentucky. Humana's business activities in the state generate a payment of taxes at these levels of around \$674 million by the company, and the operations of its suppliers and other businesses that depend upon the consumer spending of Humana employees and the employees of its suppliers helps to create an additional amount of nearly \$2 billion in local, state, and federal taxes (income, property and sales, etc.) for an estimated total of approximately \$2.6 billion.

TABLE 4

IMPACT	LOCAL	STATE	FEDERAL	TOTAL
1 - Direct	\$ 203,192,875.60	\$ 225,000,000.00	\$ 245,518,500.57	\$ 673,711,376.17
2 - Indirect	\$ 217,574,935.56	\$ 265,756,047.69	\$1,085,562,873.33	\$1,568,893,856.58
3 - Induced	\$ 79,972,141.32	\$ 92,425,385.44	\$ 229,595,364.95	\$ 401,992,891.71
TOTAL	\$ 500,739,952.48	\$ 583,181,433.13	\$ 1,560,676,738.85	\$ 2,644,598,124.46
MULTIPLIERS	2.46	2.59	6.36	3.93

Table 5 shows parallel results when the Louisville metro region is examined for tax payments. As can be seen again, the bulk of Humana's presence in the Kentucky economy is grounded in the Louisville region, though many of the company's employees are geographically dispersed and therefore contribute to local taxes across the state.

LOCAL	STATE	FEDERAL	TOTAL
\$ 99,731,303.78	\$ 177,960,727.17	\$ 224,631,865.27	\$ 502,323,896.23
\$ 111,535,274.40	\$ 216,706,951.96	\$ 584,673,050.58	\$ 912,915,276.97
\$ 44,487,897.50	\$ 82,230,352.11	\$ 154,405,433.86	\$ 281,123,683.44
\$ 255,754,475.67	\$ 476,898,031.24	\$ 963,710,349.71	\$ 1,696,362,856.64
2.56	2.68	4.29	3.38
	 \$ 99,731,303.78 \$ 111,535,274.40 \$ 44,487,897.50 \$ 255,754,475.67 	\$ 99,731,303.78 \$ 177,960,727.17 \$ 111,535,274.40 \$ 216,706,951.96 \$ 44,487,897.50 \$ 82,230,352.11 \$ 255,754,475.67 \$ 476,898,031.24	\$ 99,731,303.78 \$ 177,960,727.17 \$ 224,631,865.27 \$ 111,535,274.40 \$ 216,706,951.96 \$ 584,673,050.58 \$ 44,487,897.50 \$ 82,230,352.11 \$ 154,405,433.86 \$ 255,754,475.67 \$ 476,898,031.24 \$ 963,710,349.71

TABLE 5

REVENUE PROJECTIONS FOR HUMANA

Holding all else constant while looking into the future, Figure 1 shows that continued steady and strong growth in Humana's revenues can be projected using a trend line based upon its 2016 to 2022 revenues. Unless there are significant change in its business environment, Humana can be expected to earn around \$110 to \$111 billion in revenues by 2025 which would probably continue to be a significant portion of Kentucky's economy as well as that of the Louisville metro area.



HUMANA PHILANTHROPY FOR 2022

For 2022, and using records provided by Humana, the company's philanthropy has had benefits for Kentucky beyond its immediate spending effects. More specifically and more than other Managed Care Organizations (MCOs) in the Commonwealth, Humana has made significant investments in the community in support of better health outcomes. In valuing the volunteer hours of employees, employee financial donations, corporate donations, in-kind gifts, etc., an average of around \$51 million annually is estimated to have been given by Humana, its employees, and the Humana Foundation, the philanthropic arm of the company. This amount in turn generates an approximate additional \$24.5 million which includes income for the entities that do business with the philanthropic beneficiaries as well as the induced effects of employee spending of these beneficiaries and their vendors. Around \$2 million per year is created by the volunteer work of Humana employees, including non-profit Board service. Please see Table 6.

Humana giving also typically supports around 322 jobs total in the state with labor income totaling almost \$17 million.

EMPLOYMENT	PAYROLL/LABOR INCOME	REVENUES/OUTPUT
176	\$ 8,613,270.37	\$51,000,000.00
88	\$ 5,074,714.11	\$ 14,386,847.51
58	\$ 3,160,807.86	\$ 10,169,030.58
322	\$ 16,848,792.34	\$ 75,555,878.09
1.83	1.96	1.48
	176 88 58 322	176 \$ 8,613,270.37 88 \$ 5,074,714.11 58 \$ 3,160,807.86 322 \$ 16,848,792.34

Table 7 illustrates the tax consequences of Humana's philanthropic efforts. The approximate, average \$51 million in giving not only creates additional jobs and payroll in the state, but it also generates tax receipts from philanthropic recipients, supplier organizations, organizations in retailing, housing, etc., and their employees.

TABLE 7					
	 LOCAL	 STATE	FEDERAL		TOTAL
1 - Direct	\$ 445,951.08	\$ 177,960,727.17	\$ 224,631,865.27	\$ 50	02,323,896.23
2 - Indirect	\$ 141,913.62	\$ 216,706,951.96	\$ 584,673,050.58	\$ 9	12,915,276.97
3 - Induced	\$ 197,878.70	\$ 82,230,352.11	\$ 154,405,433.86	\$ 2	81,123,683.44
TOTAL	\$ 785,743.40	\$ 476,898,031.24	\$ 963,710,349.71	\$ 1,6	96,362,856.64
MULTIPLIERS	2.56	2.68	4.29		3.38

SUPPORTING HEALTH RELATED SOCIAL NEEDS

Humana has several benefits, programs, and pilots in place to support its members' health-related social needs. The company is addressing food insecurity, housing insecurity, transportation needs, and supporting workforce development needs.

Humana recognizes that health is local, and so to truly address health equity and health related social needs for its members, Humana also prioritizes supporting the communities where members live. The previously cited average of \$51 Million per year in financial and in-kind investments from Humana and the Humana Foundation have primarily been made to community-based organizations across the Commonwealth that are also focused on health-related social needs.

DISASTER RESPONSE

Disaster relief is an important aspect of Humana's approach to meeting health-related social needs. Following two major disasters in 6 months impacting Kentuckians (tornadoes in Western Kentucky, floods in Eastern Kentucky), market operations quickly mobilized outreach and support, driven by data analytics and an 'all-hands-on-deck' approach.

- Within 48 hours, communicated prescription drug and prior authorization policy updates,
- Quickly developed member impact rosters, sub-segmenting for members at highest risk, deploying CM and other resources, and
- Provider and Community engagement teams engaged local communities.
- Humana made several financial and in-kind donations to community-based organizations that were providing supports to impacted communities.
- Humana stood up initiatives to build the region's capacity. Some examples from Western Kentucky
 - o Co-Sponsored and volunteered at rapid response free health clinic in Mayfield, KY following the tornadoes.
 - o Partnered with FastNet, LLC to expand broadband infrastructure in Lyon County, including community hotspots and telehealth hub.
 - o Partnered with community-based organizations to support workforce development initiatives, resulting in 81 hires at Humana from the region.

BEHAVIORAL HEALTH INVESTMENTS

Humana has made several investments focused on Behavioral Health, including:

- Sponsorships and donations to behavioral health-focused community-based organizations across the Commonwealth, including UofL Peace Hospital, Healing TREE, NAMI (National Alliance on Mental Illness), The Morton Center, Lexington McKinney-Vento program, Seven Counties, Community Safe and Healing Fund of Louisville, Regional Interagency Councils, Wellspring, Volunteers of America, Merryman House, and several others.
- Major examples to highlight:

o Partnering with Volunteers of America (VOA) to deliver residential substance use disorder support for pregnant women and mothers at Clay County, KY's Freedom House.

o Behavioral Health Transportation Assistance Pilot - This Bus Pass Pilot provides transportation cards/vouchers to members receiving care at Seven Counties Services (SCS). Cards/ vouchers can be used to ensure transportation to determined health activities (e.g., follow-up appointments, lab work, preventative screenings).

HUMANA'S CONTRIBUTION MAKES KENTUCKY A MAJOR PLAYER IN MILITARY CONTRACTS

Thanks to the large size of Humana's contract with the US Department of Defense for TRICARE, Kentucky ranks within the top 10 of all states and the District of Columbia when it comes to the amounts received per capita for military contracts (Table 8). Humana's contribution is at least and on average two-thirds or more of the contracts received by the Commonwealth and has totaled roughly \$66 billion over the last twenty years or so. This is much greater than typical defense contractors in the state such as Boeing, Raytheon, and Bechtel. As Table 9 demonstrates, when it comes to military share of state gross domestic product, and for the US government's fiscal year totals for 2022, Kentucky comes in seventh place among 50 states and the District of Columbia (US Department of Defense Office of Local Defense Community Cooperation (OLDCC) 2023).

TABLE 8		CONTRACT SPENDING PER
STATE	POPULATION 2022	STATE PER CAPITA 2022
District of Columbia	678,972	\$ 11,847.55
Connecticut	3,617,176	\$ 5,906.54
Virginia	8,715,698	\$ 4,816.63
Maryland	6,180,253	\$ 2,825.36
Alaska	733,406	\$ 2,727.65
Kentucky	4,526,154	\$ 2,333.94
Hawaii	1,435,138	\$ 2,258.73
Alabama	5,108,468	\$ 2,010.33
Maine	1,395,722	\$ 1,949.81
Massachusetts	7,001,399	\$ 1,939.50

TABLE 9

STATE	RANK	PCT. OF STATE GDP FY2022
Virginia	1	9.70%
Hawaii	2	8.90%
Connecticut	3	6.90%
District of Columbia	4	6.70%
Alaska	5	6.30%
Maryland	6	5.60%
Kentucky	7	5.30%

SUMMARY AND CONCLUSION

To recap, Humana provides many economic and philanthropic benefits to the Commonwealth of Kentucky and to the Louisville Metro area.

- Around 11,000 Humana jobs statewide support another approximate 51,000 jobs in the state. In the Louisville metro area, 9,000 Humana jobs support another 36,000 or so jobs.
- Humana payrolls and revenues also have "ripple" effects that resonate throughout the state and Louisville regional economy. One dollar of Humana payroll helps to create over another \$3.01 in payroll throughout each region.
- Humana output has not only contributed an average of \$4.5 billion to Kentucky state gross domestic output over the last several years, but in doing so, this output has multiplier effects of that add over another \$9.4 billion to the Commonwealth's output. This is similar for the Louisville Metro area where \$6.5 billion in output by Humana creates an additional and slightly greater amount of output in the region.
- Humana pays a sizeable share of local, state, and federal taxes due to its large economic presence in each region. For each dollar in total taxes paid by Humana, around another \$4.00 in tax revenues is generated due to its transactions with its vendors and due to the spending of its employees and vendors' employees.
- For every 10,000 additional enrollees added to a Kentucky-headquartered MCO, an additional \$4M in program funding can be retained within the Commonwealth. Today, nearly \$600M annually in program funding is estimated to flow out of Kentucky. The overall impact of the increase in Medicaid market share could lead to an additional \$2.09 billion in indirect and induced revenue effects throughout the state if Humana is permitted one third of the Medicaid market in the state.
- Kentucky ranks within the top 10 of all states and the District of Columbia when it comes to the
 amounts received per capita for military contracts, thanks in part to Humana's contract for TRICARE.
 Humana's contribution is at least and on average two-thirds or more of the contracts received by the
 Commonwealth and has totaled roughly \$66 billion over the last twenty years or so.
- The future of Humana's revenues and profitability appear to be very good over the next few years as long as current and past trends continue.

It should also be noted that through Humana's provision of health insurance and other health services to its members that it also immensely increases the quality of life for many people. Millions of people throughout the United States are Humana subscribers and members who benefit from Humana product and services. Through the insurance and coverage of their medical needs, Humana's beneficial impacts go beyond those that which can be assigned dollar values.

REFERENCES:

IMPLAN[®] model. 2023. 2023 Data, using inputs provided by the user and IMPLAN Group LLC, IMPLAN System, 16905 Northcross Dr., Suite 120, Huntersville, NC 28078 <u>www.IMPLAN.com</u>.

Insurance Information Institute. 2022. <u>https://www.iii.org/publications/a-firm-foundation-how-insurance-supports-the-economy/driving-economic-progress/major-players-rankings-by-line</u>. Accessed on November 5, 2023.

Isard, Walter et al. Methods of Regional Analysis: An Introduction to Regional Science. MIT Press 1960.

Isard, Walter and Thomas W. Langford. *Regional Input-Output Study: Recollections, Reflections, and Diverse Notes on the Philadelphia Experience*. The MIT Press. 1971.

Leontief, Wassily W. Input-Output Economics. 2nd ed., New York: Oxford University Press, 1986.

Miller, Ronald E. and Peter D. Blair. *Input-Output Analysis: Foundations and Extensions*, 2nd edition. Cambridge University Press, 2009.

Ravesteijn B, van Kippersluis H, van Doorslaer E. The contribution of occupation to health inequality. Res Econ Inequal. 2013 Jan 1;21:311-332. doi: 10.1108/S1049-2585(2013)0000021014. PMID: 24899789; PMCID: PMC4041295. Accessed on January 3, 2024.

US Bureau of Labor Statistics. 2023. https://www.bls.gov/. Accessed on November 5, 2023.

US Department of Commerce, Bureau of Economic Analysis. *Regional multipliers: A user handbook for regional input-output modeling system (RIMS II)*. Third edition. Washington, D.C.: U.S. Government Printing Office. 1997.

US Department of Defense Office of Local Defense Community Cooperation (OLDCC). 2023. *Defense Spending by State Fiscal Year 2022*. October 2023. <u>https://oldcc.gov/dsbs-fy2022</u>. Accessed on January 24, 2024.