Coast Range Association Comments-B

Sustainable Communities

Northwest Forest Plan Amendment

Draft Environmental Impact Statement (DEIS)

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CHAPTER 3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

The DEIS states that based on public scoping comments and input from tribes and the NWFP Federal Advisory Committee (FAC), a list of significant issues required further analysis. The significant issues found are told on page ES-6:

- 1. Incorporation of Indigenous Knowledge and Increase Tribal Engagement,
- 2. Fire Resistance and Resilience,
- 3. Biological Resources,
- 4. Climate Change,
- 5. Air Quality, and
- 6. Sustainability of Regional Communities

Earlier CRA comments include by reference the Federal Advisory Committee's recommendations about Indigenous Knowledge and Increase Tribal Engagement. CRA Comments-A address fire resistance and resilience, biological resources, and climate change. This document, CRA Comments-B, addresses the topics Sustainability of Regional Communities.

All above topics are referred to as "impact topics" as in what impacts will occur by changing the NWFP? The DEIS assesses the environmental consequences (an analysis) of actions associated with the alternatives relevant to the impact topics. The analysis area considered varies by issue. In general, the analysis area includes NWFP national forests; however, some issues require broader areas due to the nature of the issue and resource

considered. We now arrive at comments on the Sustainability of Regional Communities assessment covering the full extent of the 72 counties within the area of NWFP.

At page 3-99, the DEIS begins the discussion of Sustainability of Regional Communities.

The DEIS states "This proposed amendment is in part designed to improve resistance and resilience to fire where needed and through restoration treatment support economic sustainability in communities affected by forest management in the NWFP area. The Notice of Intent also identified for the need to address environmental justice concerns and ensure tribal inclusion in developing and implementing plan direction in the NWFP."

"Unless specified otherwise, the information presented in this section is reported for the 72-county NWFP socioeconomic region." "The two exceptions where a related but distinct set of counties is used for analysis are: (1) a sub-set of 54 of the 72 counties developed as part of the 25-year report; and (2) a set of 92 counties that augments the original 72 counties....." The above narrative is confusing. We leave it to the Forest Service to decide which set of counties our comments address.

The DEIS references the NWFP's 25 year report.

The framework used in the 25-year report sets up a typology of counties based on federal forest land outputs and forest industry employment prior to the beginning of the NWFP era (1994) (Adams, in press [a]). Each of the 72 counties in the socioeconomic analysis is placed into one of six groups based on the relative importance of four federal forest land management indicators (circa 1988) and two employment indicators (1990). The six groups are as follows:

- 1. None (18 counties): No significant relationship to federal forest lands.
- 2. Low (9 counties): Federal forest management is relatively unimportant.
- 3. **Moderate (17 counties):** Federal forests are moderately important.
- 4. High (11 counties): Federal forests and industry employment are highly important.
- 5. **Very High (7 counties):** Federal forests and industry employment are of very high importance, especially in terms of revenue-sharing payments from federal timber sales.
- 6. **Extremely High (10 counties):** Federal forests and wood products industries employment are extremely important in these counties.

The 72 counties that make up the NWFP socioeconomic region are listed and shown by the above typology group in Table 3-17 and Figure 3-6, respectively. The methodology used to develop this typology is described in detail in Adams (in press [a]). The typology is used to help organize data in the DEIS assessment.

In summary, a county typology was created and used in the DEIS related to Forest Service land outputs and forest industry employment. Counties are placed into one of six groups based on the relative importance of four indicators (not data) circa 1988 and two employment indicators (not data) circa 1990. OK, it's back to the future and what is the outcome?

Table 3-17. List of counties in the NWFP socioeconomic region by typology group. Oregon counties only listed

0 - None	1 - Low	2 - Moderate	3 - High	4 - Very High	5 - Extremely High
Clatsop County, OR	Columbia County, OR	Clackamas County, OR	Benton County, OR	Coos County, OR	Crook County, OR
Sherman County, OR	Jefferson County, OR	Marion County, OR	Deschutes County, OR	Hood River County, OR	Curry County, OR
		Multnomah County, OR	Tillamook County, OR	Jackson County, OR	Douglas County, OR
		Polk County, OR	Wasco County, OR	Lane County, OR	Josephine County, OR
		WA County, OR		Lincoln County, OR	Klamath County, OR
		Yamhill County, OR		Linn County, OR	

3.8.1.2 Methodology (How the Forest Service determined Economic Impacts – the data)

"Economic contribution analysis estimated employment and labor income attributable to the use of national forests. Economic contributions came from a Forest Economic Analysis Spreadsheet Tool (FEAST) which is based on economic multiplier coefficients from the Impact Analysis for Planning (IMPLAN) model and software (USDA Forest Service 2023b)."

"Economic contributions are estimated by agency spending, payments to local governments, the use of forest resources for forest products and grazing, and recreational activities. Forest product volumes were used to estimate jobs supported. Volumes from all 17 national forest units are included to reflect the complete economic contribution of forest products across the region. Jobs supported are the estimate of average annual full-time, part-time, temporary, and seasonal jobs. Estimated labor income is expressed as the sum of employee compensation (wages, salaries, and other benefits) and proprietary income (payments received by small business owners or self-employed workers). The following analysis evaluates the contribution of existing national forest use in this expanded NWFP region, as well as the changes in contribution associated with the action alternatives."

The FEAST model consists of direct and secondary contributions: *Direct* contributions come from economic activity associated with Forest Service programs and management activities. *Indirect* contributions are generated by expenditures on goods and services by suppliers who provide goods and services to the identified forest use. *Induced*

contributions are generated by the spending of households associated either directly or indirectly with the identified forest use.

Results of Analysis

"The 92-county study area used to assess economic contributions has a very large and diverse economy, with an estimated total of 8.4 million jobs and \$670 billion in labor income in 2021 (IMPLAN 2021)."

Table 3-21. Estimated annual employment and labor income by program area, 2021

Program Area	Direct Employment (Jobs) 1/	Indirect and induced Employment (Jobs)	Total Employment (Jobs)	Direct Labor Income (\$ million) 1/	Indirect and induced Labor Income (\$ million)	Total Labor Income (\$ million)
Forest	2,280	2,811	5,091	\$179.7	\$177.1	\$356.9
Products						
Agency	4,898	2,172	7,070	\$479.2	\$149.5	\$628.7
Operations						
Payments to Local	654	283	937	\$54.4	\$19.9	\$74.3
Governments						
Recreation	9,076	3,475	12,551	\$377.9	\$250.4	\$628.3
Visitors						
Livestock	614	237	851	\$2.9	\$12.0	\$14.9
Grazing						
Total Supported	17,522	8,976	26,499	\$1,094	\$609	\$1,703

We therefore find that:

Total analysis area jobs = 8,400,000 compared to 26,499 jobs associated with Forest Service programs and management activities. About 1 out of every 317 jobs.

Total analysis area labor income = \$670 billion compared to \$1.7 billion associated with Forest Service programs and management activities. About \$1 out of every \$394 of income.

However, the DEIS notes that "jobs are not distributed evenly across the region and may be important to smaller, rural communities that have less diverse economies and fewer economic opportunities than communities with larger populations." Let's look at Lincoln County, Oregon – a **very high** impacted county.

2022 Lincoln County Income**

Total Personal Income,	\$5000.8 million = 1	100.0%
Non-Labor Income	\$2000.3 million =	39.5%
Dividends, Interest, & Rent	\$1000.4 million =	24.0%
Transfer Payments	\$ 895.8 million =	15.5%
Labor Earnings	\$3000.5 million =	60.5%

2023 Lincoln County Employment**

Services	% of employment	69.8%
Government	% of employment	14.1%
Timber	% of employment,	2.6%*
Agriculture (2022)	% of employment,	1.6%
Travel & Tourism	% of employment,	35.0%

^{*}Includes the Georgia Pacific paper mill which also uses recycled paper.

https://headwaterseconomics.org/apps/economic-profile-system/41041

In **no** sense can Lincoln County be considered a **Very High Impact** county in relation to Forest Service 'land outputs' and 'forest industry employment'. The typing of Benton County as **High Impact** is just as incorrect. It is our conclusion, that the Forest Service lands do not Moderate, High or Very High impact to any county near the Siuslaw National Forest. And, the DEIS analysis does not support the conclusion that Forest Service generated revenues have an impact on counties associated with the Siuslaw National Forest.

All the rigmarole of the Sustainable Rural Communities section hardly sheds light on rural vitality or decline. Such an analysis would have to delve into wealth distribution and monetary flows **to and from** households for the planning region.

In 2024, the Coast Range Association summarized over twenty years of forest and socioeconomic research into a report titled *Building Wealth in Oregon's Rural Communities: A PROPOSAL*.

We explore a question hardly asked in Pacific Northwest forestry circles: "how many timber sale dollars stay local and how many go elsewhere from timber harvest?" The DEIS proposes a large increase in timber harvest and that such sales will help sustain regional communities. A close look at today's timber and milling industries suggests otherwise.

Weyerhaeuser reports that the cost of log production is about 60% of the sales dollar of a log. No one asserts Weyerhaeuser is not an efficient timber producer.

Typical timber production costs involve:

Equipment – Purchase, depreciation and interest on loans/leases.

Labor - Direct wages, medical benefits, workers compensation, retirement programs, etc. **Consumable supplies** - fuel, oil, tires, repair parts and materials, service calls and charges, and any equipment that can be expensed.

Contract services – Log hauling, equipment moving, road building, or other work by an external contractor.

Insurance & Administrative Overhead – Office employees, office and shop rent and/or maintenance, mechanics, accounting and legal services, phone, electricity, training expenses,

^{**}Source Headwater Economics' Economic Profile System

licenses and permits, local property and business taxes, heating and any other costs not directly tied to production. Our *Building Wealth* report has the following two tables:

	roduction: omy or Somewhere Else
Spent Locally (Rural Economy)	Spent Urban or Out of State
Wages for Rural Loggers	Wages for Urban Based Loggers
Rural Contractors: Logging and Hauling	Payments to Urban- Based Contractors
Rural Sourced Supplies & Services	Urban Sourced Supplies & Services
None	Urban Support Professionals & Managers
None	Insurance & Bank Fees
None	Fuel & Related Purchases
None	Purchase or Lease of Equipment
Very Little	Administrative Overhead for Forest Management

Gros	s Cash Profits:	Where Do The	ey Go?
Rural/ Local	Urban Centers	Out of State	Out of Country
Replanting			
Community Donations	Community Donations		
	Lobbying, Advertising, Legal and Financial Services	Lobbying, Advertising, Legal and Financial Services	?
	Corporate Services Purchased	Corporate Services Purchased	Corporate Services Purchased
	?	Profits to Investors & Shareholders	Profits to Investors & Shareholders
		Payments to Bondholders & Bank Debt	Payments to Bondholders & Bank Debt
		Bonuses & Executive Compensation	
?	Company Retirement Fund	Company Retirement Fund	Company Retirement Fund
		Stock Repurchases	Stock Repurchases
Local Tax Payments	Some State Tax Payments	Some Federal Tax Payments	

The above left table qualitatively describes cash flow of logging as to rural or urban spending. If we include lumber milling and logging for gross profits, we get the above table on the right – a qualitative picture of cash flow's end location.

While admirable, the DEIS's intention to help sustain regional rural communities in moist, wet and rainforest areas is not borne out by how today's timber and milling industries work or how the economy as whole works. Why this is so is seen in Lincoln County's sources of income where dividends, interest and rents account for 25% of all income.

Federal government data indicates where income flows by the following breakdown of households: The richest 1/10th of 1%, the next 9/10th of 1%, the next 9% of households, the next 40% of households, and the bottom 50% of households.

The DEIS should have assessed income flows by the above income brackets for the NWFP areas of concern.

For each household bracket, the Federal government also reports on seven types of assets, three types of liabilities and a resulting net worth. Here are the reported asset categories:

Official Name

Real Estate
Consumer Durables

Description

Homes, building & Land
Products lasting longer than 3 years

Corporate equities and mutual fund shares Stocks or Funds of Stocks

DB pension Entitlements Company guaranteed retirement fund

DC pension Entitlements Personal retirement funds
Private Businesses Direct business ownership

Other Assets Things of value but not listed above.

And three three types of household liabilities are:

Home Mortgages Consumer Credit Other Liabilities

Below is the data on household wealth in two segments: The top 1/10th of 1% segment and the bottom 50% segment:

Assets & Liabilities: Top 1/10th of 1% or 134,000 Households

As represented by data for 2nd Quarter 2024

25,838,143 x 1 million	\$ 27.8 trillion dollars*
26,586,220 x 1 million =	\$ 26.6 trillion dollars
2,000,000 x 1 million =	\$ 2.0 trillion dollars (earn income and avoid taxes)
4,534,798 x 1 million =	\$ 4.5 trillion dollars (earn rents)
385,172 x 1 million =	\$ 385 billion dollars (Live the high life)
11,192,250 x 1 million =	\$ 11.2 trillion dollars (earn dividends/profits)
846,932 x 1 million =	\$ 847 billion dollars
1,420,708 x 1 million =	\$ 1.4 trillion dollars
3,826,100 x 1 million =	\$ 3.8 trillion dollars (earn profits)
4,380,260 x 1 million =	\$ 4.4 trillion dollars (earn rents and profits)
748,077 x 1 million =	\$ -748 billion dollars
-347,087 x 1 million =	\$ -347 billion dollars (pay interest gain equity)
-112,244 x 1 million =	\$ -112 billion dollars (pay interest)
-288,746 x 1 million =	\$ -289 billion dollars (pay other costs)
	26,586,220 x 1 million = 2,000,000 x 1 million = 4,534,798 x 1 million = 385,172 x 1 million = 11,192,250 x 1 million = 846,932 x 1 million = 1,420,708 x 1 million = 3,826,100 x 1 million = 4,380,260 x 1 million = 748,077 x 1 million = -347,087 x 1 million = -112,244 x 1 million =

^{*}Official assets and liabilities plus secret offshore wealth.

And here is the net worth of the bottom 50% of households, the very people who often make up the rural population the DEIS proposes to help.

^{**} Zuckman, et al 2014 estimate hidden assets equal 7% of GDP value. We estimate <10% of GDP value.

Assets & Liabilities: Bottom 50% = 65,500,000 U.S. Households

As represented by data for 2nd Quarter 2024

Net Worth	3,628,532 x 1 million =	\$ 3.6 trillion dollars
Assets	9,576,350 x 1 million =	\$ 9.6 trillion dollars
Hidden Assets*	0 x 1 million =	\$ 0 dollars
Real estate	4,783,837 x 1 million =	\$ 4.8 trillion dollars (pay costs of home)
Consumer durables	1,852,458 x 1 million =	\$ 1.9 trillion dollars (pay costs of car and boat)
Stocks and funds	396,227 x 1 million =	\$ 396.2 billion dollars (earn dividends)
Company pensions	469,568 x 1 million =	\$ 469.6 billion dollars (retire and die early)
Personal pensions	606,651 x 1 million =	\$ 606.6 billion dollars (retire and die early)
Private businesses	165,472 x 1 million =	\$ 165.5 billion dollars (earn profits)
Other assets	1,302,137 x 1 million =	\$ 1.3 trillion dollars (earn other income)
Liabilities	5,947,817 x 1 million =	\$ -6.0 Trillion dollars
Home mortgages	-3,019,531 x 1 million =	\$ -3.0 Trillion dollars (pay interest)
Consumer credit	- 2,572,828 x 1 million =	\$ -2.6 Trillion dollars (pay high interest)
Other liabilities	- 355,458 x 1 million =	\$ -355.5 billion dollars (pay higher interest)

\$3.6 Trillion net worth divided by 65,500,000 households = \$55,397 net worth per household. Basically, equity in a home and car. A table of income flows in household sectors is as shocking as the wealth divide.

Comparing both household segments provides insight into the current economy. In today's economy, the lion's share of income flows to the business owning, professional, technical and managerial sector of the economy (top 9% of households) and the ultra-wealthy 1%.

A DEIS analysis of income flows and wealth outcomes for the 72 county study area would have shed light on the likely outcome of timber and milling income flows. Of the large dollar value of proposed DEIS timber harvest, a negligible fraction stays in the rural economy. Yes, the Forest Service could say a dollar number for local wages and other spending that stays local. And to many the number may appear significant. But absent to full dollar flow picture, there is no basis to evaluate the full cost compared to the gain.

The CRA *Building Wealth* report also has data on the loss of small landowner forest ownership by acres. And we report on low rural population growth or outright decline for rural areas. Our data in both instances comes from Forest Service research or Census data.

Lastly, the economic forces that impoverish the rural counties studied in the DEIS are in play across the country. Macroeconomic analysis is needed to understand those forces, not a static regional I-O analysis from IMPLAN.

Appendix 1 below, clearly shows the shocking structure of the U.S. economy. The largest sector by sales is Wall Street finance and banking. Pet food sales in the U.S. are almost equal (2023 about \$50 billion) to the entire sales of the forestry and fishing industries (\$57,000 billion)! That is not a comment about pet food as much as a comment about the commodity value of timber, lumber and fish!

DEIS intentions for economic benefit may support tribal welfare because tribal populations are known and identified. And tribal governments exist to act as a conduit for the use of forest values.

We wish the Forest Service well on sustaining rural communities. Industrial timber cutting is a false path that harms federal moist, wet and rainforests and goes against many secular and sacred values. Until the distribution of **income issue** is solved in the U.S., sustaining rural communities will be a highly problematic enterprise.

Appendix 1.

Businesses Organized by Sector: Gross Sales

U.S. Real Gross Output by Industry

From the U.S. Bureau of Economic Analysis (BEA)

What is Real Gross Output by Industry: Economy-wide, principally a measure of an industry's sales or receipts, which includes sales to final users in the economy (GDP) and sales to other industries (intermediate inputs).

(All numbers in millions of dollars)

1	All industries	\$39,391,167
2	Private industries	\$35,251,649
3	Agriculture, forestry, fishing, and hunting	\$447,439
4	Farms	391,903
5	Crop production	175,478
6	Animal production and aquaculture	218,345
7	Forestry, fishing, and related activities	55,512
8	Mining	\$576,161
9	Oil and gas extraction	389,073
10	Mining, except oil and gas	94,357
11	Support activities for mining	100,858
12	Utilities	\$500,934
13	Electric power generation, transmission, and distribution	403,529
14	Natural gas distribution and water, sewage and other systems	97,309
15	Construction	\$1,633,317
16	Education, hospital, and health structures	134,035
17	Maintenance and repair construction	266,272
18	Office and commercial structures	155,242
19	Other residential construction	367,205
20	Other nonresidential structures	212,126
21	Power and communication structures	106,201
22	Single-family residential structures	251,809
23	Transportation structures and highways and streets	141,004
24	Manufacturing	\$5,634,992

25	Durable goods	2,884,651
26	Wood products	126,617
27	Nonmetallic mineral products	117,746
28	Primary metals	245,027
29	Iron and steel mills and manufacturing from purchased steel	128,039
30	Nonferrous metal production and processing and foundries	115,473
31	Fabricated metal products	301,848
32	Machinery	340,513
33	Agricultural implement manufacturing	31,171
34	Construction machinery manufacturing	34,749
35	Mining and oil and gas field machinery manufacturing	16,051
36	Other machinery	258,671
37	Computer and electronic products	389,249
38	Computer and peripheral equipment manufacturing	41,098
39	Communications equipment manufacturing	54,625
40	Semiconductor and other electronic component manufacturing	140,487
41	Navigational, measuring, electromedical, and control instruments	148,930
42	Other computer and electronic product manufacturing	6,384
43	Electrical equipment, appliances, and components	119,573
44	Motor vehicles, bodies and trailers, and parts	672,111
45	Automobile manufacturing	35,416
46	Light truck and utility vehicle manufacturing	312,655
47	Heavy duty truck manufacturing	28,966
48	Motor vehicle body, trailer, and parts manufacturing	296,754
49	Other transportation equipment	360,626
50	Aerospace product and parts manufacturing	287,584
51	All other transportation equipment manufacturing	73,759
52	Furniture and related products	61,014
53	Miscellaneous manufacturing	163,619
54	Medical equipment and supplies manufacturing	101,562
55	Other miscellaneous manufacturing	62,328
56	Nondurable goods	2,756,641
57	Food and beverage and tobacco products	926,735
58	Food manufacturing	746,369
59	Beverage manufacturing	114,971
60	Tobacco product manufacturing	65,489
61	Textile mills and textile product mills	39,778
62	Apparel and leather and allied products	21,661
63	Paper products	157,278
64	Printing and related support activities	66,295
65	Petroleum and coal products	479,514
66	Chemical products	831,287
67	Basic chemical manufacturing	199,806
68	Resin, rubber, and artificial fibers manufacturing	104,459
69	Pharmaceutical and medicine manufacturing	339,747
70	Other chemical manufacturing	190,641

72		62 470 942
72	Wholesale trade	\$2,170,843
73	Motor vehicle and motor vehicle parts and supplies merchant wholesalers	152,057
74 75	Professional and commercial equipment and supplies merchant wholesalers	211,881
75 76	Household appliances and electrical and electronic goods merchant wholesalers	228,527
76	Machinery, equipment, and supplies merchant wholesalers	187,807
77 70	Other durable goods merchant wholesalers	294,981
78 70	Drugs and druggists' sundries merchant wholesalers	268,087
79	Grocery and related products merchant wholesalers	186,461
80	Petroleum and petroleum products merchant wholesalers	172,606
81	Other nondurable goods merchant wholesalers	375,409
82 83	Wholesale electronic markets and agents and brokers Customs duties	40,590
83	Customs duties	48,455
84	Retail trade	\$2,164,370
85	Motor vehicle and parts dealers	361,954
86	Food and beverage stores	253,730
87	General merchandise stores	239,079
88	Other retail	1,301,532
89	Building material and garden equipment and supplies dealers	137,283
90	Health and personal care stores	144,204
91	Gasoline stations	105,708
92	Clothing and clothing accessories stores	153,396
93	Non-store retailers	548,800
94	All other retail	223,744
95	Transportation and warehousing	\$1,345,355
96	Air transportation	259,341
97	Rail transportation	72,293
98	Water transportation	52,587
99	Truck transportation	381,616
100	Transit and ground passenger transportation	137,595
101	Pipeline transportation	51,084
102	Other transportation and support activities	279,141
103	Scenic and sightseeing transportation and support activities	176,169
104	Couriers and messengers	103,071
105	Warehousing and storage	131,297
106	Information	\$2,509,117
107	Publishing industries, except internet (includes software)	601,503
108	Newspaper, periodical, book, and directory publishers	86,560
109	Software publishers	522,061
110	Motion picture and sound recording industries	196,836
111	Broadcasting and telecommunications	915,749
112	Broadcasting (except Internet)	249,960
		2 13,300

113	Wired telecommunications carriers	296,729
114	Wireless telecommunications carriers (except satellites)	321,001
115	Other telecommunications, including satellite	53,783
116	Data processing, internet publishing, and other information services	803,467
117	Data processing, hosting, and related services	399,588
118	Other information services	404,573
		.0.,070
119	Finance, insurance, real estate, rental, and leasing	\$7,601,945
120	Finance and insurance	3,108,544
121	Federal Reserve banks, credit intermediation, and related activities	1,022,282
122	Securities, commodity contracts, and investments	709,398
123	Insurance carriers and related activities	1,233,930
124	Direct life insurance carriers	115,256
125	Insurance carriers, except direct life insurance	602,054
126	Agencies, brokerages, and other insurance related activities	524,490
127	Funds, trusts, and other financial vehicles	150,523
128	Real estate and rental and leasing	4,496,244
129	Real estate	3,952,563
130	Housing	2,278,008
131	Owner-occupied housing	1,743,872
132	Tenant-occupied housing	534,196
133	Other real estate	1,679,998
134	Rental and leasing services and lessors of intangible assets	546,399
135	Professional and business services	\$5,051,977
135 136		\$5,051,977 3.031,236
136	Professional, scientific, and technical services	3,031,236
136 137	Professional, scientific, and technical services Legal services	3,031,236 349,223
136	Professional, scientific, and technical services Legal services Computer systems design and related services	3,031,236 349,223 774,272
136 137 138	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services	3,031,236 349,223
136 137 138 139 140	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services	3,031,236 349,223 774,272 1,927,246 203,943
136 137 138 139	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services	3,031,236 349,223 774,272 1,927,246
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136 137 138 139 140 141 142 143 144 145 146	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014
136 137 138 139 140 141 142 143 144 145 146 147	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services Administrative and support services	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014 1,133,987
136 137 138 139 140 141 142 143 144 145 146 147	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services Employment services	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014 1,133,987 433,880
136 137 138 139 140 141 142 143 144 145 146 147 148 149	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services Administrative and support services Employment services Services to buildings and dwellings	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014 1,133,987
136 137 138 139 140 141 142 143 144 145 146 147 148 149 150	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services Employment services	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014 1,133,987 433,880 270,061
136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services Administrative and support services Employment services Services to buildings and dwellings Other administrative and support services Waste management and remediation services	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014 1,133,987 433,880 270,061 429,618 122,806
136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services Administrative and support services Employment services Services to buildings and dwellings Other administrative and support services Waste management and remediation services	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014 1,133,987 433,880 270,061 429,618 122,806
136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152	Professional, scientific, and technical services Legal services Computer systems design and related services Miscellaneous professional, scientific, and technical services Accounting, tax preparation, bookkeeping, and payroll services Architectural, engineering, and related services Management, scientific, and technical consulting services Scientific research and development services Advertising, public relations, and related services Specialized design and other professional, scientific, and technical services Management of companies and enterprises Administrative and waste management services Administrative and support services Employment services Services to buildings and dwellings Other administrative and support services Waste management and remediation services	3,031,236 349,223 774,272 1,927,246 203,943 397,785 480,208 406,241 191,773 250,840 771,537 1,256,014 1,133,987 433,880 270,061 429,618 122,806

156	Ambulatory health care services	1,326,592
157	Offices of physicians	609,162
158	Offices of dentists	142,570
159	Offices of other health practitioners	150,912
160	Outpatient care centers	199,997
161	Other ambulatory health care services	225,367
162	Hospitals	966,186
163	Nursing and residential care facilities	254,741
164	Social assistance	265,772
165	Arts, entertainment, recreation, accommodation, and food services	\$1,710,240
166	Arts, entertainment, and recreation	429,727
167	Performing arts, spectator sports, museums, and related activities	244,837
168	Amusements, gambling, and recreation industries	185,319
169	Accommodation and food services	1,281,541
170	Accommodation	299,824
171	Food services and drinking places	981,201
172	Other services, except government	776,772
173	Repair and maintenance	240,859
174	Personal and laundry services	233,993
175	Religious, grantmaking, civic, professional, and similar organizations	283,622
176	Private households	19,235
177	Government	¢4 140 633
		\$4,140,632
178	Federal	1,245,971
179	Federal general government	1,161,506
180	National defense	669,380
181	Nondefense	491,947
182	Government enterprises	85,102
183	State and local	2,893,351
184	State and local general government	2,530,979
185	State and local government educational services	1,146,117
186	State and local government hospitals and health services	363,024
187	State and local government other services	1,022,713
188	Government enterprises	362,235
189	Not allocated by industry\1\	-213,845
	Addenda:	
190	Private goods-producing industries \2\	8,309,841
191	Private services-producing industries \3\	26,971,464
192	Information-communications-technology-producing industries \4\	3,232,189

What is Gross Output by Industry? "Principally, a measure of an industry's sales or receipts. These statistics capture an industry's sales to consumers and other final users (found in GDP), as well as sales to other industries (intermediate inputs not counted in GDP). They reflect the full value of the supply chain

by including the business-to-business spending necessary to produce goods and services and deliver them to final consumers."

See: https://www.bea.gov/data/industries/gross-output-by-industry