


Target Cluster Profiles

Advanced Manufacturing


Advanced Manufacturing

Advanced Manufacturing in Clackamas County is organized around legacy anchor firms with an international presence that manufacture primary metals, fabricated metal products, machinery, and transportation equipment. It is one of the most well-organized clusters in the region, grown out of Oregon’s legacy manufacturing firms and labor proficiencies in metals manufacturing. Many firms in this sector support a broader supply chain providing components, parts and machinery service aerospace, advanced tools, and other industrial and transportation equipment.




NAICS 331: Primary Metals Manufacturing

Clackamas County’s primary metals sector is anchored by PCC structural, which serves a function of attracting a broad labor pool that spills into other sectors in the region.




NAICS 332: Fabricated Metals Manufacturing

This sector serves a broad range of functions, from machining and precision tuning to production of fabricated metal components serving many industries including many of the equipment and tool manufactures in the region.



NAICS 333: Machinery Manufacturing

Clackamas County has over 25 medium to large firms producing value-added machine products. These firms employ over 1,200 workers across the county.



NAICS 336: Transportation Equipment Manufacturing

Clackamas County’s transportation equipment manufacturing sector is small and dominated by medium-sized firms producing motor vehicle parts, boats, and aircraft parts and equipment.

Economic Impacts (dollars in millions)

Firms in the anchor sectors of **Advanced Manufacturing** employ 8,275 employees in Clackamas County. The annual direct contribution to the local economy is **\$599 million dollars in value-added output**. Secondary effects contribute an additional 6,000 jobs and \$399 million in value-added output.

Impacts	Jobs	Labor Income	Value Added	Output
Direct	8,275	\$831.4	\$598.9	\$2,000.0
Indirect	3,475	\$280.0	\$266.8	\$507.0
Induced	2,525	\$150.1	\$132.3	\$217.3
Total	14,275	\$1,261.5	\$998.0	\$2,724.3

Major Employers

- Warn
- PCC Structurals
- Blount/Oregon Tool
- Benchmade
- Vigor
- DW Fritz
- SSI
- Orchid Orthopedic

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The **Advanced Manufacturing** cluster relies on **63 different goods and service categories** in a production function that allows it to support \$2.0 billion dollars in annual economic output and **\$599 million in value-added output**.

Raw materials, specifically other metal products and components are the most important production inputs. Of the \$1.4 billion in commodity inputs that support this output, **42.3 percent** is cross spending across other parts of the anchor sectors.

Key Industries by Gross Inputs

Gross Inputs are the goods and services that make up the production function that produces another good or service, *regardless of where these inputs are sourced*. In the **Advanced Manufacturing** Cluster, the top 20 inputs represent **90.5% of all production inputs**. Inputs are overwhelmingly materials inputs such as iron and steel ferroalloy products, scrap metal, machined products, aluminum, and ferrous and nonferrous metals products.

TOP SECTORS	GROSS INPUT (millions)
Primary Metal Manufacturing	\$420.0
Merchant Wholesalers, Durable Goods	\$233.3
Fabricated Metal Product Manufacturing	\$194.2
Professional, Scientific, and Technical Services	\$106.7
Transportation Equipment Manufacturing	\$84.9
Scrap	\$63.2
Computer and Electronic Product Manufacturing	\$60.3
Management of Companies and Enterprises	\$59.5
Administrative and Support Services	\$57.0
Truck Transportation	\$47.4
Utilities	\$33.4
Plastics and Rubber Products Manufacturing	\$30.2
Chemical Manufacturing	\$23.2
Paper Manufacturing	\$20.9
Securities, Commodity Contracts, and Other Financial Investments and Related Activities	\$20.6
Machinery Manufacturing	\$18.9
Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services	\$16.8
Credit Intermediation and Related Activities	\$14.6
Rail Transportation	\$14.3
Real Estate	\$13.0

SOURCE: IMPLAN and ECONorthwest

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Firms in the **Advanced Manufacturing** sector support a broad range of other sectors within the Clackamas County economy. Across all inputs that support **Advanced Manufacturing, 79 percent** of production inputs are purchased within the County. This makes Advanced Manufacturing one of the the most complete clusters in the region



79% Local Absorption Rate

Inputs that are large parts of the overall production function and have high rates of local purchase are core elements of what makes up a cluster. In **Advanced Manufacturing** these include:

Example Local Inputs with High Regional Purchase Coefficients (RPC)

- 94.6%** Wholesaling, Durable Goods
- 87.6%** Truck Transportation
- 55.2%** Scrap Metal
- 94.4%** Computer Programming
- 28.7%** Ferrous Metals

Key Industries by Regional Inputs

Regional inputs are the goods and services that make up a production function but *are purchased locally within the local economy*. In the **Advanced Manufacturing** Cluster, the largest regional inputs include a mix of wholesale, professional and financial services, and raw materials.

TOP SECTORS	REGIONAL INPUT (millions)	GROSS INPUT (millions)
Merchant Wholesalers, Durable Goods	\$196.4	\$233.3
Professional, Scientific, and Technical Services	\$78.9	\$106.7
Administrative and Support Services	\$49.0	\$57.0
Truck Transportation	\$41.5	\$47.4
Scrap	\$34.9	\$63.2
Management of Companies and Enterprises	\$32.1	\$59.5
Utilities	\$19.6	\$33.4
Primary Metal Manufacturing	\$16.8	\$420.0
Fabricated Metal Product Manufacturing	\$15.1	\$194.2
Real Estate	\$13.0	\$13.0
Computing Infrastructure Providers, Data Processing, Web Hosting	\$12.0	\$16.8
Securities, Commodity Contracts, and Other Financial Investments	\$11.2	\$20.6
Merchant Wholesalers, Nondurable Goods	\$10.6	\$12.2
Repair and Maintenance	\$8.8	\$9.4
Credit Intermediation and Related Activities	\$8.4	\$14.6
Insurance Carriers and Related Activities	\$7.5	\$9.3
Monetary Authorities-Central Bank	\$6.4	\$12.3
Waste Management and Remediation Services	\$5.5	\$5.5

SOURCE: IMPLAN and ECONorthwest