Advanced Technology – High Tech

Advanced Technology-High Tech is a leading employment cluster in both Clackamas County and the State of Oregon, paying higher wages and projecting favorable long-term growth prospects. Oregon has grown into one of the largest exporters of high tech goods nationwide.

Clackamas County’s high tech cluster includes industries that manufacture a variety of electronic components and software systems for computers, energy, transportation, aerospace, motor vehicles and defense-related products. Leading high tech employers in Clackamas County include: Flir Systems (thermal sensing devices for defense and civilian use), TE Connectivity (electromagnetic connectors and relays), OECO (electromagnetic and power conversion devices for defense, commercial aerospace and medical sectors), Johnson Controls (auto and energy devices) and Xerox Corporation (production equipment and software). These industries export their goods and services throughout the U.S. and the world and represent many of Clackamas County’s largest business establishments. Local high tech businesses within Clackamas County are fairly concentrated in Wilsonville, and small to mid-size businesses are located in Kruse Way, Milwaukie and Canby.

Economic Benefits to Clackamas County and Region

Clackamas County’s advanced technology-high tech cluster is one of the largest clusters in the County. This cluster is comprised of nearly 250 businesses with over 8,000 employees throughout Clackamas County.

Key advantages of this cluster include: high wage rates; strong growth expectations; and multiple career opportunities with a range of skill levels from administration and sales/marketing to engineering managers and technicians.

As a direct economic benefit, production costs, employee compensation, and tax payments account for nearly $2.5 billion in direct value added GDP in Clackamas County, and leverages an additional $757 million in secondary regional GDP from supply chain purchases and employee spending multipliers.
Advanced Technology—High Tech Strategic Market Opportunities

- Global demand for Oregon’s high tech exports is expected to expand in the future as the U.S. emerges from its current recession. China emerged as Oregon's leading trade partner in 2009, and Portland International Airport provides convenient direct air freight cargo access to China and other international markets.

- Clackamas County’s high tech economy was not significantly impacted by the most recent economic recession as it primarily focuses on energy, electronic parts, electromagnetic devices, transportation, aerospace and defense-related products.

- The expanding “green economy” is providing a new source of job growth and business investment in Clackamas County for products such as high efficiency appliances, renewable energy generation and storage devices, high-efficiency building products, and low-emission fuels. The role of advanced technologies, such as high tech manufacturing and systems design, are critical in the expanding green economy and should benefit existing and emerging technology companies within Clackamas County.

- The Oregon Employment Department forecasts most new job growth in the high tech cluster to occur in service sectors, such as systems design and software publishing.

- Clackamas County’s existing mix of high tech companies, convenient location (access to Portland, PDX Airport, Washington County and the I-205 and I-5 corridors), mix of entry level and executive housing options, variety of neighborhoods, Class A office and industrial employment centers and proximity to recreational areas (such as Mt. Hood, and the Clackamas and Willamette rivers) makes it an ideal place for creative professionals to live and work. The ability to appeal to both young creative class individuals and upper-income executives are positive assets for attracting high tech employees and investment.

Advanced Technology - High Tech Cluster
North American Industrial Classification System (NAICS) Categories

334: Computer and Electronic Product Manufacturing
This includes establishments that manufacture computers, computer peripherals (such as printers), medical instruments, communications equipment and electronic components used in a wide variety of consumer and defense-related products.

335: Electrical Equipment, Appliances and Component Manufacturing
Industries in this sector manufacture products that generated, distribute and use electrical power. This includes both small and major electrical appliances and parts, such as motors, generators, transformers, gauges and switches. Devices that store electrical power (e.g. batteries) or transmit electricity (e.g., insulated wires and cables) are included in this sector.

371-372: Computer Programming and Systems Design
511210: Software Publishers
This is comprised of businesses that are primarily engaged in computer software publishing and/or reproduction. These businesses carry out the operations necessary to design, produce, document, distribute and provide related high tech support services.
Sample of High Tech Companies in Clackamas County

<table>
<thead>
<tr>
<th>Company Name</th>
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<tbody>
<tr>
<td>Flir Systems Inc.</td>
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<tr>
<td>Johnson Controls Battery Group Inc.</td>
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<td>MEC Northwest</td>
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<tr>
<td>Mentor Graphics Corp</td>
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<tr>
<td>Micro Systems Engineering Inc.</td>
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<td>Oeco LLC</td>
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<tr>
<td>Rockwell Collins Inc.</td>
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<tr>
<td>Sunstone Circuits Inc.</td>
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<tr>
<td>TE Connectivity</td>
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Source: Oregon Employment Department; FCS GROUP
* Indicates top 100 County Business Listing.

Existing Advanced Manufacturing – High Tech Businesses: Annual Economic Output by General Location*

Economic Output Key:
- Low
- Medium
- High
Career Opportunities

The Oregon Employment Department forecasts new job openings for occupations in the high tech cluster. The leading job occupations in this cluster include:

- Semiconductor/electrical/electronic assemblers
- Industrial engineering technicians
- Computer hardware engineers
- Engineering managers
- Engineering technicians
- Managers and supervisors
- Computer software and systems engineers
- Sales engineers
- Executive assistants

Resources

Clackamas County Business & Economic Development
www.clackamas.us/business

Business Oregon
www.oregon4biz.com

Clackamas Workforce Partnership
www.clackamasworkforce.org

Clackamas Community College
www.clackamas.edu

TechAmericaOregon
www.techamerica.org/oregon

Technology Association of Oregon
www.

Oregon Institute of Technology
www.oit.edu/portland/programs

Marylhurst College
www.marylhurst.edu

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