The Ohio Rubber & Plastics Industry

Ohio's Standing

Ohio ranks first among the 50 states in plastics and rubber products employment. The industry employs 75 thousand Ohio workers—15 thousand more than second place California.

Ohio plastics and rubber products manufacturers ship \$14.3 billion in products.

Within the plastics and rubber products industry, nearly three out of four people work in the plastics product sector. However, the rubber products sector is more concentrated in Ohio. The state's rubber sector employs 12.4 percent of the nation's rubber workers. Ohio's Plastics industry employs 8.3 percent of the nation's plastics workers.

Three related industries employ an additional 10,000 workers:

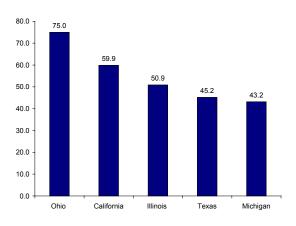
- Ohio ranks first in the custom compounding of purchased resins industry (NAICS 325991) with 10.4 percent the U.S. industry's total employment.
- Ohio also ranks first in plastics and rubber industry machinery (NAICS 33322). The most current figures indicate that 13.6 percent of the U.S. workers in this industry are employed in Ohio factories.
- Ohio is a leader in the resin and synthetic rubber industry (NAICS 32521) with about 5,000 workers and 6.3 percent of the U.S. industry's workforce.

Seven Fortune 1000 corporations are headquartered in Ohio and operate one or more rubber/plastics facilities in Ohio:

- Goodyear Tire & Rubber, Akron, is the world's largest tire company. Goodyear also makes automotive hoses and belts and operates more than 2000 tire and auto service centers.
- Parker Hannifin, Cleveland, is the world's leading diversified manufacturer of motion and control machinery. Its industrial products include fluid connectors such as rubber hoses.
- Owens-Illinois, Toledo, is a leading worldwide manufacturer of glass and plastic packaging. Plastic packaging products include consumer products and prescription containers.
- Owens Corning, Toledo, is a leading maker of fiberglass and composite materials. Its building materials unit makes fiberglass products for home insulation, boats, cars, and shower stalls. It also makes foam insulation, roofing materials, vinyl windows and siding, and patio doors.
- Cooper Tire & Rubber, Findlay, is the fourth largest tire maker in North America.
- PolyOne, Cleveland, was formed by the 2000 merger of plastics companies Geon and M.A. Hanna. PolyOne is among North America's largest plastics compounders and resin distributors.
- □ Ferro Corporation, Cleveland, makes ceramic glazes as well as specialty plastic compounds, colors, and additives.

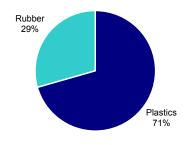
Employment: Top 5 States





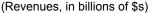
Source: U.S. Bureau of Labor Statistics

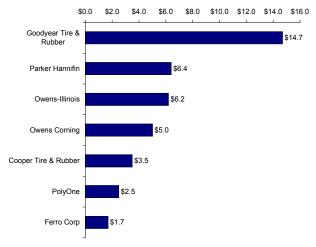
Employment by Sector



Source: U.S. Bureau of Labor Statistics

Ohio-Based Fortune 1000 Firms





Source: Fortune, April 2004

Key Trends

- Nationally, employment in the plastics and rubber products industry peaked in February 2000 at 960 thousand workers. Since that time, employment has declined by 155 thousand workers.
- Ohio followed a similar path. Industry employment peaked in February 2000 at 92 thousand workers and since then has declined 20 percent.
- Throughout the 1990s, Ohio maintained a fairly constant share of the nation's plastics and rubber product employment.
- During this period, employment in the rubber products sector was very stable. However, since 2000, employment has fallen by 8 thousand workers, and the state's share of the U.S. industry's employment total has declined by one and a half percentage points.
- Ohio-based plastics employment increased steadily throughout the 1990s (see bar chart to the right). And, though the employment total recently has fallen to 1994 levels, Ohio's share of the national industry is well above its share in 1994—8.3 percent in 2003 compared to 7.6 percent in 1994.

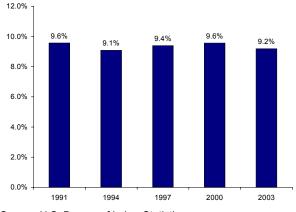
Employment Forecast

- □ Looking to the future, the Ohio Bureau of Labor Market Information projects that the industry will add 5,000 workers by 2010—over 2000 employment levels.
- Tire Industry employment is projected to decline by onethird, but the plastics industry is expected to gain nearly 7,000 thousand workers—expanding by just over 10 percent during this ten-year period.

Exports

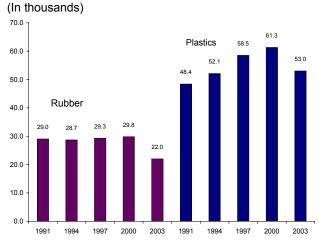
- Ohio firms exported \$1.1 billion worth of plastics and rubber products in 2003. Ohio exports, in this category, have been remarkably steady over the past five years.
- Canada is the single largest market receiving 49 percent of the \$1.1 billion total. Mexico is the second largest market, and Japan ranks third.
- Growth in exports, over the last five years, has come from sales to markets outside of the three largest markets. Sales to European Union countries increased 9.7 percent, and sales to the remaining 113 countries, collectively, increased 10.2 percent.
- Direct exports of plastics and rubber products accounted for 7.7 percent of total sales. The Census Bureau estimates that an additional \$1.4 worth of plastic and rubber products were incorporated into goods (such as cars) that eventually were exported.

Share of U.S. Employment



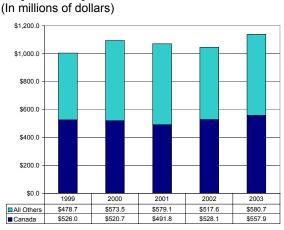
Source: U.S. Bureau of Labor Statistics

Employment by Sector



Source: U.S. Bureau of Labor Statistics

Export Shipments



Source: U.S. Department of Commerce

Investment Trends

Capital Expenditures

- Just as Ohio leads the nation in plastics and rubber employment, it ranks first among the 50 states in new capital expenditures-investment in buildings and equipment.
- Ohio's share of the U.S. industry's new capital expenditures averaged 9 percent for the five-year period featured in the bar chart to the right-a percentage that approximates its share of total employment.

Announced Projects

- Over the three-year period from 2001 to 2003, the Ohio Department of Development identified 125 major investment projects in the rubber and plastics industry (plastics and rubber products combined with resin producers and compounders). A major project is defined as a project involving at least \$1 million, 50 new jobs, or 20,000 additional square feet.
- □ These 125 projects are associated with commitments to add 3.9 thousand new jobs and invest \$645 million.

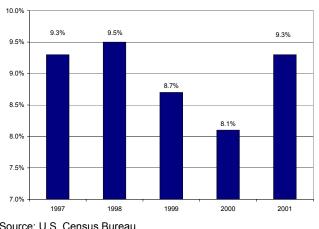
Recent Projects

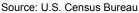
- □ Newell Rubbermaid recorded the single largest investment in 2003 with its decision to purchase \$58 million worth of equipment for its Home Products plant in Mogadore.
- □ ThyssenKrupp Budd invested \$12.5 million in its Carey plant. Budd is a full service supplier to automotive OEMs.
- □ Advanced Composites Inc (ACI) is expanding its 145 thousand square foot facility in Sidney to add a new production line. The \$7.7 million project will result in 25 new jobs.

ACI, an affiliate of Japan's Mitsui Chemicals, makes polypropylene plastic compounds for the automotive industry. The company supplies General Motors, Visteon, Ford, and DaimlerChrvler as well as Honda and Tovota.

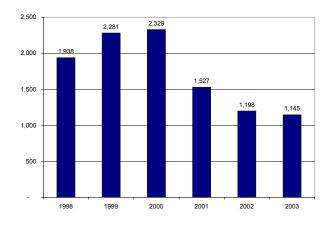
ACI's plastic pellets are used by the auto industry primarily for bumpers. However, the company expects manufacturers to continue an ongoing trend of replacing interior panels with lighter-weight plastics.

Share of Capital Expenditures





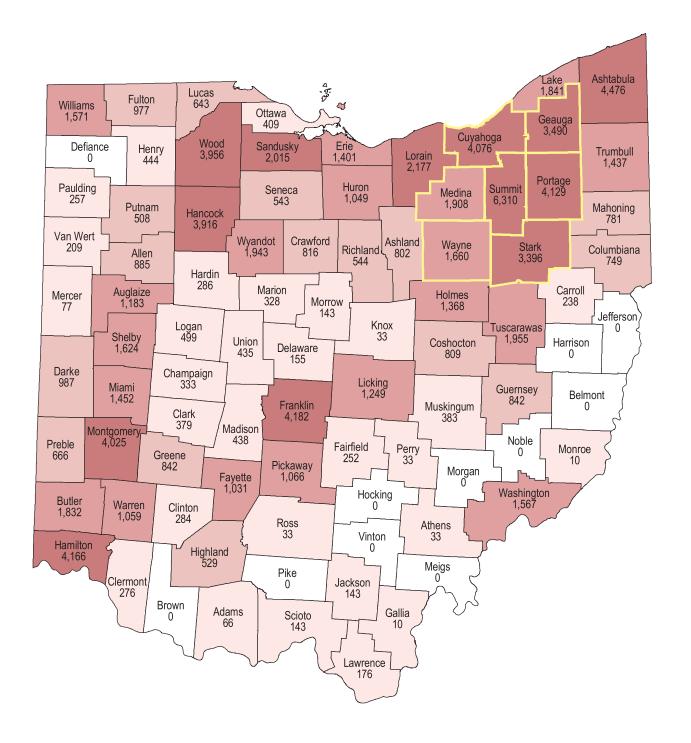
Announced Projects: New Jobs



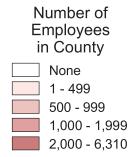
Top 5 Projects, 2003

Company	County	Product	Investment (Millions \$s)
Newell Rubbermaid	Summit	Home prdts	\$58.3
ThyssenKrupp/Budd Co	Wyandot	Auto parts	\$12.5
Solvay Advanced Polymers	Washington	Resins	\$10.2
Advanced Composties	Shelby	Pellets	\$7.7
PET Processors	Lake	Resins	\$7.3

Source: Ohio Department of Development



Employment in the Rubber & Plastics Industry By County



Source: 2001 County Business Patterns, U.S. Census Bureau

Prepared by: Office of Strategic Research Ohio Department of Development February 2004