

The Ohio Motor Vehicle Industry

Contribution to the Economy

- Ohio's motor vehicle and equipment group (SIC 371) produced \$12 billion worth of goods in 1997—about one-seventh of the U.S. output and second only to Michigan.
- This \$12 billion represents 3.8 percent of Ohio's gross state product (GSP). By comparison, output from motor vehicles and equipment accounts for 1.1 percent of the nation's gross domestic product.
- These GSP figures underestimate the importance of the motor vehicle industry because they do not include the output from a wide array of industries that supply parts, materials, and services.
- A broader view of the industry's size takes into account contributions from a cluster of industries producing goods used by the motor vehicle industry. Approximately 25 percent of Ohio's manufacturing activity is related to the production of motor vehicles.
- With the inclusion of non-manufacturing activities, the total economic output associated with the motor vehicles cluster exceeds 16 percent of the state's private-sector economy.

Vehicle Production

- Approximately 1,860,000 motor vehicles were assembled in Ohio plants in 1998—about one-sixth of U.S. production and second only to Michigan.
- Over 1,016,000 cars were assembled in Ohio in 1998—over one-sixth of U.S. output and second only to Michigan.
- Over 840,000 light trucks were assembled in Ohio in 1998—one-seventh of the national total, ranking Ohio third behind Michigan and Missouri.

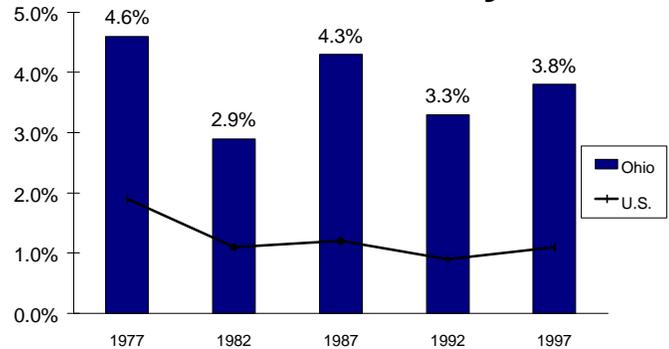
Key Sectors

- 683 motor vehicle industry establishments in Ohio employed more than 151,000 people in 1997—almost 8 percent of the nation's motor vehicle industry establishments and 12 percent of its workforce.
- The greatest concentration of motor vehicle industry employment in Ohio occurs in automotive stampings (SIC 3465—20 percent of the nation) and vehicular lighting (SIC 3647—18 percent of the nation).

Suppliers

- There are 2,063 tier-1 motor vehicle parts suppliers operating in North America. Almost 11 percent of these suppliers have one or more plants located in Ohio. More than 20 percent of Honda's tier-one suppliers have operations in Ohio.

Share of the Economy



Source: U.S. Bureau of Economic Analysis.

Ohio's Share of U.S. Employment

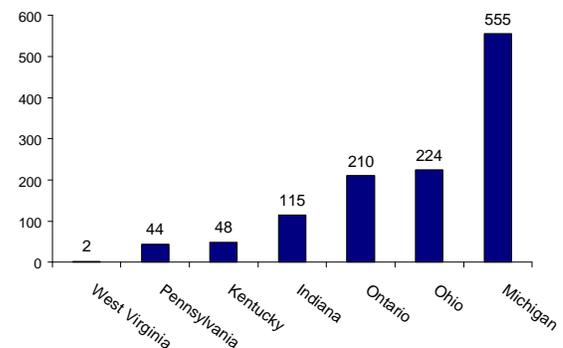
SIC Code	Industry Title	Share of U.S.
371	Motor Vehicles & Equipment	12.0%
3711	Vehicles & Car Bodies	12.6%
3713	Truck & Bus Bodies	5.9%
3714	Parts & Accessories	13.0%
3715-6	Truck Trailers & Motor Homes	1.6%

Related Sectors

3465	Automotive Stampings	20.3%
3592	Carburetors, etc.	6.4%
3647	Vehicular Lighting Equipment	18.2%
3691	Storage Batteries	2.5%
3694	Engine Electrical Equipment	7.2%

Source: U.S. Bureau of Labor Statistics (1998).

Tier-1 Suppliers



Source: ELM International

Ohio Trends

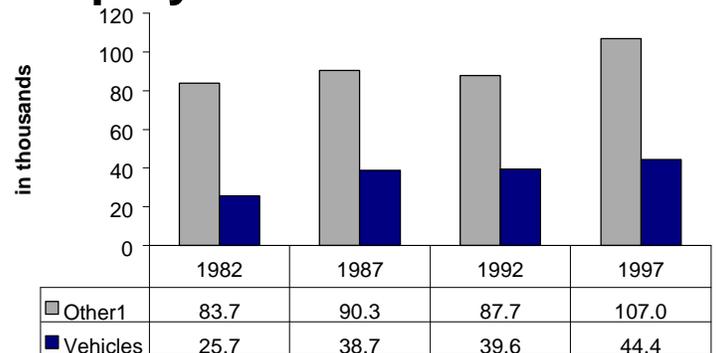
Employment

- ❑ From 1982 to 1987, motor vehicle assembly plant (SIC 3711) employment experienced a 50 percent growth rate with the addition of 13 thousand Ohio workers. During this period, consumer demand for autos increased sharply, and the Marysville Honda plant came on-line.
- ❑ After a period of stability, Ohio's assembly plants added almost 5,000 employees from 1992 to 1997. During this same 5-year period, Ohio's parts industry (SIC 3714) gained 20,000 workers.
- ❑ Although auto stampings (3465) has experienced annual net gains and losses with fluctuations in the economy, the 1984 employment figure of 23.6 thousand workers closely matches the 1997 estimate of 23.5 workers.
- ❑ Analysts at the U.S. Bureau of Labor Statistics forecast a national decline of 33,000 workers in the combined parts and assembly industry (SIC 371) from 1996 to 2006. They point to the large number of workers reaching retirement age and improvements in productivity so that retirees will be replaced at a less than one-to-one ratio.
- ❑ A similar pattern is forecast for Ohio. The Ohio Bureau of Employment Services projects 4,900 fewer motor vehicle (SIC 371) workers in 2006 compared to 1996.

Vehicle Production

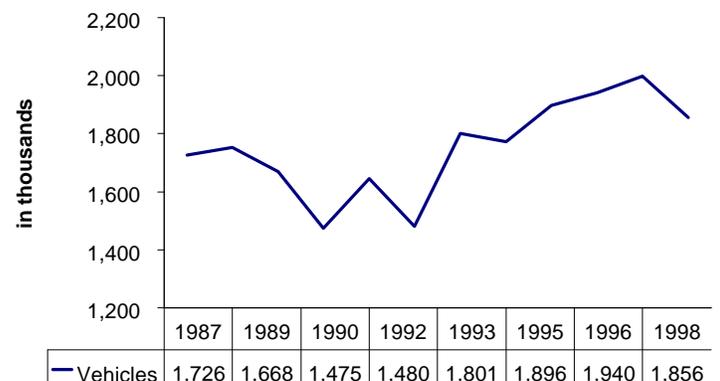
- ❑ From 1987 to 1998, vehicle production at individual plants varied from year to year, but overall the state's share of U.S. light vehicle production remained fairly stable at around 16 percent.
- ❑ During this 12-year span, Ohio became a relatively more important source for cars, rising from 13 percent of U.S. output in 1987 to 18.3 percent in 1998.
- ❑ At the same time, the state became a relatively less important source of light trucks (e.g., SUVs and minivans). Ohio's factories produced 23 percent of the nation's light truck production in 1988 compared to 13 percent in 1998.
- ❑ The latest production data from Ward's Communications indicates that Honda is the leading Ohio producer of assembled vehicles. Honda's two Ohio assembly plants make cars, while Ford and DaimlerChrysler make light trucks exclusively. GM makes both cars and light trucks.
- ❑ Comparing 1988 with 1998, GM and DaimlerChrysler maintained their share of state vehicle production. Honda's share rose from 22 percent to 37 percent, while Ford—which stopped production of Thunderbirds and Cougars at its Lorain plant in 1997—saw its share fall from 29 percent to 16 percent.

Employment

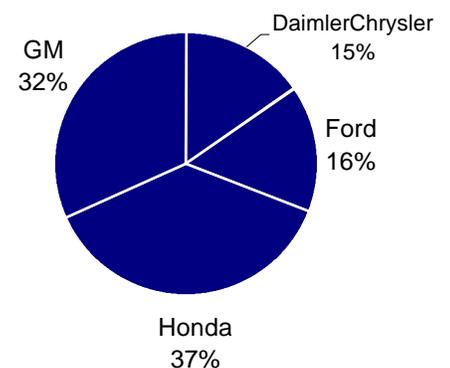


Source: U.S. Bureau of Labor Statistics. ¹SIC codes: 3713-3716 and 3465, 3592, 3647, 3691, 3694.

Assembled Light Vehicles

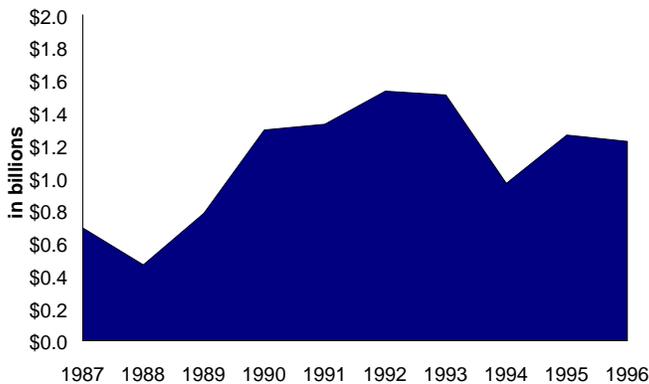


Vehicles by Company, 1998



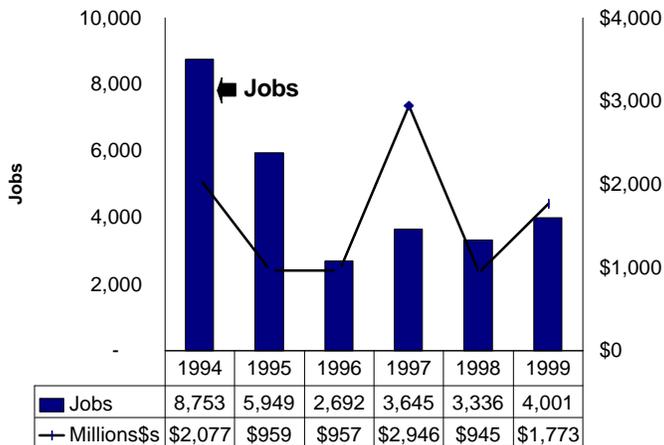
Source for vehicle assembly data: Ward's Communications

Capital Expenditures



Source: U.S. Census Bureau

Announced Auto Projects



Top 5 Announced Investments, 1999

Company	County	Product	Investment (\$millions)
ZF Batavia	Clermont	Transmissions	\$535
Ford Motor Co	Hamilton	Transmissions	\$153
DaimlerChrysler	Summit	Stampings	\$150
Delphi Automotive	Erie	Parts	\$150
Delphi Automotive	Montgomery	Chassis systems	\$104

Source for announced projects: Ohio Department of Development

Investment Trends

Capital Expenditures

- Data on new capital expenditures are available through 1996 from the U.S. Census Bureau for the motor vehicles and equipment group (SIC 371).
- For the 10-year period from 1987 to 1996, Ohio averaged 15 percent of the U.S. capital expenditure total for industry 371. This is consistent with the state's share of motor vehicle Gross Domestic Product—which ranged from 12 to 15 percent over this period of time.

Announced Projects

- Since government investment data are 3 to 4 years behind the current year, the Ohio Department of Development tracks major investment announcements in the manufacturing sector. "Major" is defined as a project involving at least \$1 million, 50 new jobs, or 20,000 square feet. Major investments are often phased in over a multi-year cycle.
- Looking at the last 6 years, 1997 was the peak investment year, reflecting DaimlerChrysler's decision to invest \$1.2 billion in a new Toledo Jeep manufacturing complex. The 6-year investment total was \$9.6 billion. The 6-year job tally sums to 28.4 thousand new workers.

Recent Projects...

- ZF Batavia—a partnership between Ford Motor Co and ZF Friedrichshafen AG—will invest \$535 million in their Clermont County plant in order to produce continuously variable transmissions.
- Ford is completing construction of a new 210 thousand square foot aluminum casting plant at its Brook Park engine complex.
- Ford's Sharonville transmission plant will receive a \$154 million injection to increase production of four-speed automatic transmissions. The plant is expected to hire 220 new workers.
- In 1998, GM and Isuzu formed DMAX Ltd to produce the next generation of diesel motors in a new 650,000 square foot facility in Moraine. Full production is scheduled for 2004.
- DaimlerChrysler's Twinsburg plant is slated for a \$150 million equipment upgrade. The Twinsburg plant is one of eight company-owned stamping plants in North America and was the best performer in 1998, according to the 1999 [Harbour Report](#).