

The Ohio Motor Vehicle Industry

Contribution to the Economy

- Ohio's motor vehicle and equipment group (SIC 371) produced \$17 billion worth of goods in 1999—about one-seventh of the U.S. output and second only to Michigan.
- This \$17 billion represents 4.6 percent of Ohio's gross state product (GSP). By comparison, output from motor vehicles and equipment accounts for 1.2 percent of the nation's gross domestic product.
- 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 28 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 17 percent of the state's private-sector economy.

Vehicle Production

- Approximately 1,860,000 motor vehicles were assembled in Ohio plants in 2000—14.6 percent of U.S. production and second only to Michigan.
- Over 1,022,000 cars were assembled in Ohio in 2000—18.4 percent of U.S. output and second only to Michigan.
- Over 840,000 light trucks were assembled in Ohio in 2000—11.6 percent of the national total, ranking Ohio third behind Michigan and Missouri.

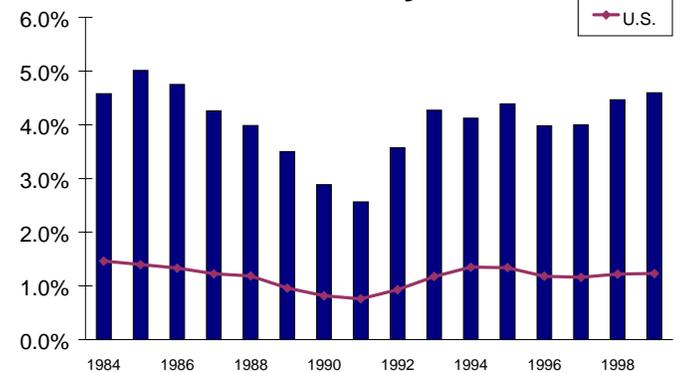
Key Sectors

- 630 motor vehicle industry establishments in Ohio employ more than 154,000 people—12.3 percent of the nation's motor vehicle industry work force.
- The greatest concentration of motor vehicle industry employment in Ohio occurs in automotive stampings (SIC 3465—21 percent of the nation) and vehicular lighting (SIC 3647—19 percent of the nation).

Suppliers

- There are 1,960 tier-1 motor vehicle parts suppliers operating in North America. Approximately 11 percent of these suppliers have one or more plants located in Ohio. More than 21 percent of Honda's tier-one suppliers have operations in Ohio.

Share of the Economy



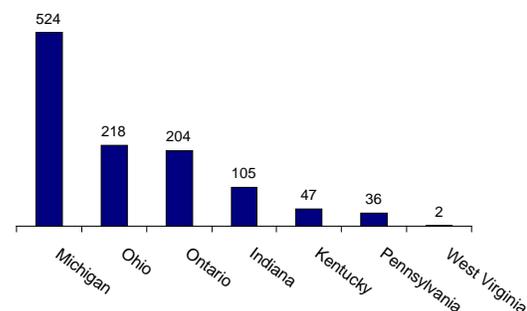
Source: U.S. Bureau of Economic Analysis

Ohio's Share of U.S. Employment

SIC Code	Industry Title	Share of U.S.
371	Motor Vehicles & Equipment	11.4%
3711	Vehicles & Car Bodies	11.5%
3713	Truck & Bus Bodies	6.4%
3714	Parts & Accessories	13.0%
3715-6	Truck Trailers & Motor Homes	1.0%
Related Sectors		
3465	Automotive Stampings	21.0%
3592	Carburetors, etc.	6.7%
3647	Vehicular Lighting Equipment	19.0%
3691	Storage Batteries	3.0%
3694	Engine Electrical Equipment	6.5%

Source: U.S. Bureau of Labor Statistics and MIG, Inc

Tier-1 Suppliers



Source: ELM International

Ohio Trends

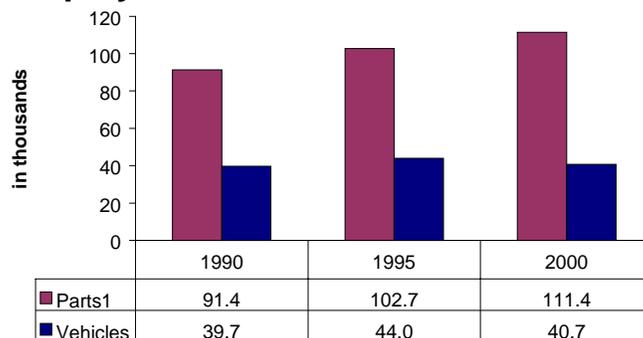
Employment

- ❑ From 1990 to 1995, Ohio assembly plant (SIC 3711) employment grew 10 percent with the addition of 4 thousand workers. Honda's East Liberty plant came on-line during this period.
- ❑ During the next five years, assembly plant employment fell to 1990 levels—even as the number of vehicles assembled reached record levels.
- ❑ In the past decade, the parts-producing sector grew 22 percent, adding 20 thousand workers. The engine electrical equipment part was an exception to this trend experiencing a one-third reduction in employment.
- ❑ Analysts at the U.S. Bureau of Labor Statistics forecast a national decline of 50,000 thousand workers in the combined parts and assembly industry (SIC 371) from 1998 to 2008. They point to moderate output growth rate projections combined with expected technological advances that will increase productivity.
- ❑ A similar pattern is forecast for Ohio. The Ohio Bureau of Labor Market Information projects 5,500 fewer motor vehicle (SIC 371) workers in 2008 compared to 1998.

Vehicle Production in Ohio

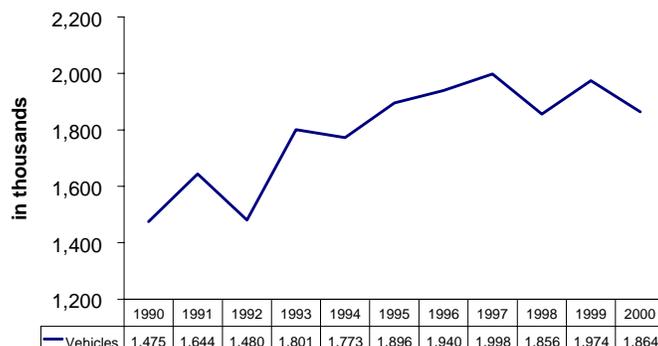
- ❑ From 1990 to 2000, light vehicle production rose from 1.5 million to just under 1.9 million. Production peaked in 1997 with a total of 1,998,454 vehicles.
- ❑ During this period, Ohio became a relatively more important source for cars, rising from 13.9 percent of U.S. output in 1990 to 18.4 percent in 2000.
- ❑ At the same time, the state became a relatively less important source of light trucks (e.g., SUVs and minivans). Ohio's factories produced 21 percent of the nation's light truck production in 1991 compared to 12 percent in 2000.
- ❑ 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 2000, 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 15 percent.

Employment

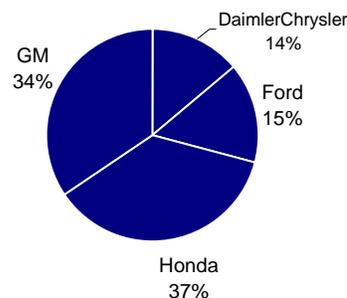


Source: U.S. Bureau of Labor Statistics. ¹SIC codes: 3713-3716 and 3465, 3592, 3647, 3691, 3694.

Assembled Light Vehicles



Vehicles by Company, Ohio 2000



Source for vehicle assembly data: Ward's Communications

Investment Trends

Capital Expenditures

- Capital expenditures in the Ohio motor vehicle industry (NAICS industries 3361-3) averaged \$2.1 billion per year for the 1997-2000 period.
- This four-year period saw a strong increase in investment related to vehicle assembly plants balanced by declining investment in the parts sector.
- The \$2.1 billion average investment figure is 14 percent of the national average. By comparison, Ohio accounts for 13 percent of the industry's jobs and 15 percent of the industry's output. This indicates that the motor vehicle industry is maintaining its manufacturing base in Ohio.

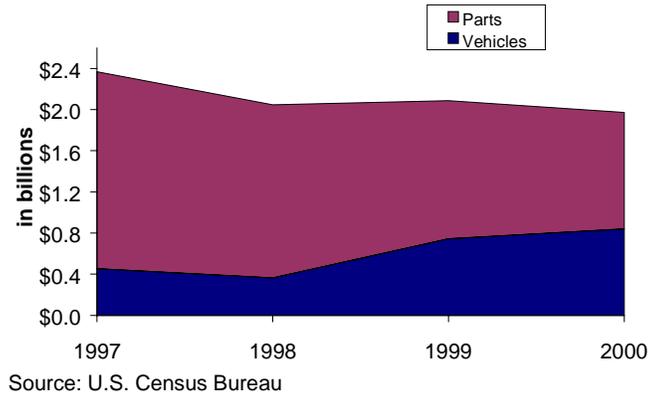
Announced Projects

- Looking at the last six years, 1997 was the peak investment year, reflecting DaimlerChrysler's decision to invest \$1.2 billion in its Toledo Jeep manufacturing complex. The six-year investment total was \$8.3 billion. The six-year job count sums to 19.8 thousand new jobs.
- In July 2001, Ford announced that it would reopen Engine Plant No. 1 in Brook Park and invest \$300 million in new machinery. Ford plans to use the plant to produce a second-generation version of the Duratec V-6 engine.
- Honda plans to build its new Element pickup truck/SUV at its East Liberty plant. The Element will go on sale in December 2002, with first year sales of 50,000 vehicles.
- In May 2002, Ford said it would keep an Avon Lake assembly line going by changing production to the Escape SUV. Ford will invest \$140 million and retain 2,000 workers.

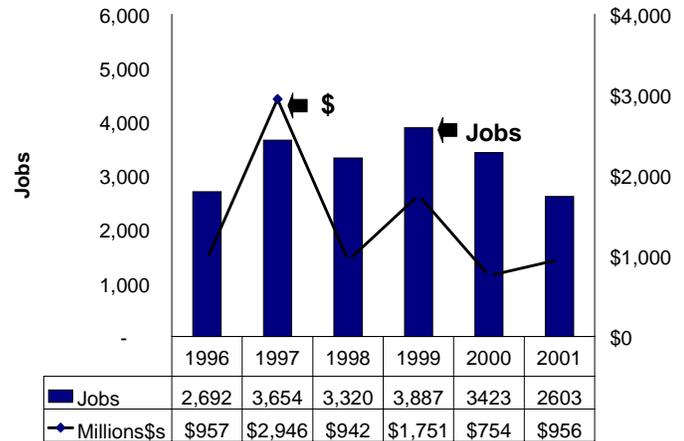
Ohio Facts

- A number of the nation's best-selling models are made in Ohio. Five models exceeded the 200,000 unit production mark in 2000—Honda's Accord and Civic; GM's Cavalier; DaimlerChrysler's Jeep; and Ford's Econoline van.
- The Honda Accord was the best selling model in America in 2001 while the Civic was the fourth-best selling model. About 85 percent of the Accords sold in America are made in Marysville.
- General Motors is the largest industry employer in Ohio with 26,000 workers; followed by Delphi (19,900), Ford (15,700), Honda (14,750), and DaimlerChrysler (12,700).

Capital Expenditures



Announced Auto Projects



Top 5 Announced Investments, 2001

Company	County	Product	Investment (millions)
Ford Motor Co	Cuyahoga	Engines	\$300
DaimlerChrysler	Summit	Stampings	\$127
General Motors	Richland	Stampings	\$91
LuK	Wayne	Parts	\$53
Cardington Yutaka	Morrow	Parts	\$38

Announced projects compiled by the Ohio Dept of Development

Total Employment in the Motor Vehicle Industry Ohio, 1999



Sources: 1999 County Business Patterns, U.S. Census Bureau; Harris InfoSource International
Prepared by: Ohio Department of Development, Office of Strategic Research (April 2002)