## Metalworking Technology

This cluster produces machine tools and process metal for use in metalworking, as well as downstream metal fasteners and hand tools. The technical report, *Metropolitan Chicago's traded industry clusters*, offers extensive data on the characteristics and performance of the Chicago region's core industrial assets since 2001, available for download at https://cmap.is/Traded-Clusters.

In the Chicago region in 2017, this cluster consisted of

\$3.4 billion total output	<b>26,000</b> jobs
<b>1,100</b> establishments	+93% more jobs than national average

Source: CMAP analysis of Economic Modeling Specialists International data (Emsi 2018.4).

Workers in this cluster tend to be **as** racially diverse than the regional labor force.

41% non-white

19% female

41% over age 50

Largest occupations

Machinists

**Machine Setters** 

**Tool and Die Makers** 

First-Line Supervisors

**Inspectors and Testers** 

In recent years, the cluster's competitive position **weakened** as it became **less specialized** in the national context.

-35% -4% total output

Chicago

jobs total output

Detroit

-28% -10%

jobs total output

Los Angeles

**-27%** 

Source: CMAP analysis of Economic Modeling Specialists International data (Emsi 2018.4). Note: Job change is from 2001-17, and total output change is from 2007-17.

Middle-skill workers have **greater** opportunity than the regional average.





**66%** 

+1%

of workers have an associate's degree or higher of jobs typically require at least 2 months of on-the-job training

Source: CMAP analysis of Integrated Public Use Microdata Series, 2017 American Community Survey and Economic Modeling Specialists International data (Emsi 2018.4).

In 2016, this cluster generated approximately

\$22.7 billion

in freight shipments that originate, terminate, or circulate regionally.

Freight mode share, by value

**72% 20% 3%**Truck Multimodal Rail

Freight trade geography, by value









14%

**29%** 

**32**%

**25%** 

Chicago Midwest region

Rest of U.S.

Global

Source: CMAP analysis of Freight Analysis Framework data (FAF 4.4.1). Note: Data includes only the Illinois portion of the U.S. Census Bureau combined statistical area. Freight data is not provided for service clusters.

Source: CMAP analysis of Integrated Public Use Microdata Series, 2017 American Community Survey data.