Vulcanized and Fired Materials

This cluster produces construction and other materials at extremely high temperatures, such as goods made of tile, brick, ceramic, glass, and rubber. 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

\$0.6 billion total output	4,200 jobs
180 establishments	-42% fewer jobs than national average

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

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

50% non-white

33% female

43% over age 50

Largest occupations

Assemblers and Fabricators

Heavy Truck Drivers

Tire Builders

Molders and Casters

Machine Setters

In recent years, the cluster's competitive position **held steady** as it remained **unspecialized** in the national context.

-31% +42%
jobs total output

Chicago

+2% +36%
jobs total output
Atlanta
+1% +14%
jobs total output
Dallas

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.





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

\$6.0 billion

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

Freight mode share, by value

80% 11% 6% Truck Multimodal Rail

Freight trade geography, by value









22%

30%

35%

13%

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.