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

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

- **50%** non-white
- **33%** female
- **43%** over age 50

In 2016, this cluster generated approximately **$6.0 billion** in freight shipments that originate, terminate, or circulate regionally.

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

- **$29,136** (25th percentile)
- **$34,634** (50th percentile)
- **$46,892** (75th percentile)

- **29%** of workers have an associate’s degree or higher
- **59%** of jobs typically require at least 2 months of on-the-job training

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

- **Chicago**:
  - **-31%** jobs
  - **+42%** total output

- **Atlanta**:
  - **+2%** jobs
  - **+36%** total output

- **Dallas**:
  - **+1%** jobs
  - **+14%** total output

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.

Freight trade geography, by value

- **22%** Chicago region
- **30%** Midwest
- **35%** Rest of U.S.
- **13%** 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.