**Downstream Chemicals**

This cluster manufactures complex chemical products for end users. These products include adhesives, beauty products, cleaners, dyes, paints, and lubricating oils. 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](https://cmap.is/Traded-Clusters).

In the Chicago region in 2017, this cluster consisted of

- **$5.6 billion** total output
- **12,900** jobs
- **360** establishments

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

- **52%** non-white
- **37%** female
- **39%** over age 50

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

- **$31,554** (25th percentile)
- **$38,349** (50th percentile)
- **$60,624** (75th percentile)

Wage percentiles

- **36%** of workers have an associate’s degree or higher
- **52%** of jobs typically require at least 2 months of on-the-job training

In 2016, this cluster generated approximately **$39.1 billion** in freight shipments that originate, terminate, or circulate regionally.

**Freight mode share, by value**

- **62%** Truck
- **6%** Multimodal
- **6%** Rail

**Freight trade geography, by value**

<table>
<thead>
<tr>
<th>Region</th>
<th>Value Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago region</td>
<td>8%</td>
</tr>
<tr>
<td>Midwest</td>
<td>57%</td>
</tr>
<tr>
<td>Rest of U.S.</td>
<td>28%</td>
</tr>
<tr>
<td>Global</td>
<td>6%</td>
</tr>
</tbody>
</table>

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.

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

<table>
<thead>
<tr>
<th>Region</th>
<th>Job Change</th>
<th>Total Output Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago</td>
<td>+11%</td>
<td>+37%</td>
</tr>
<tr>
<td>Houston</td>
<td>-3%</td>
<td>-3%</td>
</tr>
<tr>
<td>Atlanta</td>
<td>+37%</td>
<td>-3%</td>
</tr>
</tbody>
</table>

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.