Commodity Movements Originating in Vermont
Summary of 1993 CFS

In Vermont, the CFS measured $9 billion of goods weighing 12 million tons. Vermont accounted for approximately 0.1 percent of the value and the weight of total U.S. shipments. See attached table. The CFS data cover shipments by establishments in mining, manufacturing, wholesale, and selected retail and service industries. The data exclude most shipments of crude oil; therefore, the totals and percentages do not fully reflect the contribution of pipeline shipments.

The major commodities shipped by establishments in Vermont vary when measured by value and by weight of the shipments. Some of the most important commodities shipped by value were: electrical machinery, equipment, or supplies; food and kindred products; pulp, paper, or allied products; machinery, including computers; and lumber or wood products, excluding furniture. Some of the most important commodities shipped by weight were: nonmetallic minerals; lumber or wood products, excluding furniture; clay, concrete, glass or stone; food and kindred products; and petroleum or coal products.

Local transportation of freight is important to Vermont’s commerce. The distribution of commodities by domestic destination and distance of shipments reflects the importance of local transport. The CFS shows that in 1993, about 34 percent of the value and 68 percent of the weight of total shipments from Vermont were shipped to destinations within the state. About 19 percent of the value and about 71 percent of the weight of all shipments were between places less than 50 miles apart. In comparison, about 30 percent of the value and 56 percent of the weight of total U.S. shipments were between places less than 50 miles apart. In Vermont, over one-third (39 percent) of the value of shipments and over three-quarters (79 percent) of the weight of shipments were between places less than 100 miles apart.

About two-thirds (66 percent) of the value and about one-third (32 percent) of the weight of all shipments from Vermont went to other states. Some of the most important destination states by value of shipments were: New York, California, Massachusetts, Texas, and New Hampshire. Important destination states by weight of shipments were: New Hampshire, New York, Massachusetts, Maine and Michigan.

Most commodities (75 percent of the value and 96 percent of the weight) were moved by trucks. Air accounted for 9 percent of the value of shipments. The CFS data confirm the rising importance of parcel, U.S. postal, and courier services that have emerged in recent years. In 1993, this mode of transport was used to ship 48 thousand tons of goods worth over $1 billion or 13 percent of the value of all shipments in Vermont. In comparison, about 9 percent of the value of total U.S. shipments were moved by this mode.
## 1993 Commodity Flow Survey State Summary: Vermont

**Tabulation by the Bureau of Transportation Statistics, U.S. Department of Transportation**

<table>
<thead>
<tr>
<th>Summary</th>
<th>Value</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total shipments originating in Vermont</td>
<td>$8.6 billion</td>
<td>12.3 million tons</td>
</tr>
<tr>
<td>Percent of total U.S. shipments (preliminary U.S. estimate)</td>
<td>0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commodity Shipments Originating in Vermont Ranked by Value</th>
<th>Commodity Shipments Originating in Vermont Ranked by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Commodity</strong></td>
<td><strong>Percent of value</strong></td>
</tr>
<tr>
<td>Electrical machinery, equipment, or supplies</td>
<td>26.7</td>
</tr>
<tr>
<td>Food or kindred products</td>
<td>13.8</td>
</tr>
<tr>
<td>Pulp, paper, or allied products</td>
<td>6.2</td>
</tr>
<tr>
<td>Machinery, including computers</td>
<td>5.4</td>
</tr>
<tr>
<td>Lumber or wood products, excluding furniture</td>
<td>5.3</td>
</tr>
<tr>
<td>Other commodities</td>
<td>42.7</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Domestic Destinations of Shipments Originating in Vermont Ranked by Value</th>
<th>Domestic Destinations of Shipments Originating in Vermont Ranked by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>State</strong></td>
<td><strong>Percent of value</strong></td>
</tr>
<tr>
<td>Vermont</td>
<td>34.2</td>
</tr>
<tr>
<td>New York</td>
<td>9.1</td>
</tr>
<tr>
<td>California</td>
<td>7.0</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>6.4</td>
</tr>
<tr>
<td>Texas</td>
<td>3.9</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>3.4</td>
</tr>
<tr>
<td>Other States</td>
<td>36.0</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Modes of Transportation for Shipments Originating in Vermont

<table>
<thead>
<tr>
<th>Modes</th>
<th><strong>Percent of value</strong></th>
<th><strong>Percent of weight</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel, U.S. Postal Service, or courier service</td>
<td>13.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Truck (for-hire, private, and both private truck and for-hire truck)</td>
<td>74.9</td>
<td>95.5</td>
</tr>
<tr>
<td>Air (including truck and air)</td>
<td>8.6</td>
<td>-</td>
</tr>
<tr>
<td>Rail</td>
<td>0.8</td>
<td>**</td>
</tr>
<tr>
<td>Water (inland water, Great Lakes, deep sea, truck and water, and rail and water)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pipeline*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Truck and rail intermodal combination</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Other intermodal (truck and pipeline, inland and Great Lakes, inland and deep sea)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other, unknown, and withheld for sampling and disclosure reasons</td>
<td>2.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### Domestic Distance Shipped for Commodities Originating in Vermont

<table>
<thead>
<tr>
<th>Distance</th>
<th><strong>Percent of value</strong></th>
<th><strong>Percent of weight</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50 miles</td>
<td>18.5</td>
<td>71.4</td>
</tr>
<tr>
<td>50 to 99 miles</td>
<td>20.5</td>
<td>7.2</td>
</tr>
<tr>
<td>100 to 249 miles</td>
<td>14.9</td>
<td>8.8</td>
</tr>
<tr>
<td>250 to 499 miles</td>
<td>10.6</td>
<td>6.4</td>
</tr>
<tr>
<td>500 to 749 miles</td>
<td>7.7</td>
<td>2.4</td>
</tr>
<tr>
<td>750 to 999 miles</td>
<td>9.6</td>
<td>1.5</td>
</tr>
<tr>
<td>1,000 to 1,499 miles</td>
<td>4.7</td>
<td>1.2</td>
</tr>
<tr>
<td>1,500 to 1,999 miles</td>
<td>4.8</td>
<td>0.5</td>
</tr>
<tr>
<td>2,000 miles or more</td>
<td>8.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

* CFS data for pipelines exclude most shipments of crude oil.
** Some or all data suppressed to avoid disclosure or because data are statistically unreliable.
† Represents zero or less than 1 unit of measurement.

NOTE: Data are estimates based on a sample and subject to error. See Appendix B, "Reliability of the Data," in source document.

## 90-Percent Confidence Intervals for 1993 Commodity Flow Survey State Summary: Vermont

Tabulation by the Bureau of Transportation Statistics, U.S. Department of Transportation

### Summary

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total shipments originating in Vermont (in billion $ and million tons)</td>
<td>7.03 - 10.17</td>
<td>10.72 - 13.88</td>
</tr>
<tr>
<td>Percent of total U.S. shipments (preliminary U.S. estimate)</td>
<td>0.08 - 0.12</td>
<td>0.09 - 0.11</td>
</tr>
</tbody>
</table>

### Commodity Shipments Originating in Vermont Ranked by Value

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Percent of value</th>
<th>Commodity</th>
<th>Percent of value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical machinery, equipment, or supplies</td>
<td>7.0 - 46.3</td>
<td>Nonmetallic mineral</td>
<td>29.6 - 59.7</td>
</tr>
<tr>
<td>Food or kindred products</td>
<td>10.5 - 17.0</td>
<td>Lumber or wood products, excluding furniture</td>
<td>12.2 - 23.7</td>
</tr>
<tr>
<td>Pulp, paper, or allied products</td>
<td>2.7 - 9.8</td>
<td>Clay, concrete, glass or stone</td>
<td>7.2 - 18.5</td>
</tr>
<tr>
<td>Machinery, including computers</td>
<td>3.5 - 7.3</td>
<td>Food or kindred products</td>
<td>4.6 - 17.0</td>
</tr>
<tr>
<td>Lumber or wood products, excluding furniture</td>
<td>3.9 - 6.7</td>
<td>Petroleum or coal products</td>
<td>2.1 - 4.9</td>
</tr>
<tr>
<td>Other commodities</td>
<td>(NA)</td>
<td>Other commodities</td>
<td>(NA)</td>
</tr>
<tr>
<td>Total</td>
<td>(X)</td>
<td>Total</td>
<td>(X)</td>
</tr>
</tbody>
</table>

### Commodity Shipments Originating in Vermont Ranked by Weight

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Percent of weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical machinery, equipment, or supplies</td>
<td></td>
</tr>
<tr>
<td>Nonmetallic mineral</td>
<td></td>
</tr>
<tr>
<td>Lumber or wood products, excluding furniture</td>
<td></td>
</tr>
<tr>
<td>Clay, concrete, glass or stone</td>
<td></td>
</tr>
<tr>
<td>Food or kindred products</td>
<td></td>
</tr>
<tr>
<td>Petroleum or coal products</td>
<td></td>
</tr>
<tr>
<td>Other commodities</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

### Domestic Destinations of Shipments Originating in Vermont

#### Ranked by Value

<table>
<thead>
<tr>
<th>State</th>
<th>Percent of value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>27.9 - 40.4</td>
</tr>
<tr>
<td>New York</td>
<td>6.6 - 11.6</td>
</tr>
<tr>
<td>California</td>
<td>3.7 - 10.3</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>4.6 - 8.2</td>
</tr>
<tr>
<td>Texas</td>
<td>2.8 - 5.1</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>2.4 - 4.4</td>
</tr>
<tr>
<td>Other States</td>
<td>(NA)</td>
</tr>
<tr>
<td>Total</td>
<td>(X)</td>
</tr>
</tbody>
</table>

#### Ranked by Weight

<table>
<thead>
<tr>
<th>State</th>
<th>Percent of weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>61.9 - 74.4</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>4.3 - 8.9</td>
</tr>
<tr>
<td>New York</td>
<td>4.7 - 8.3</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1.3 - 5.3</td>
</tr>
<tr>
<td>Maine</td>
<td>1.0 - 3.9</td>
</tr>
<tr>
<td>Michigan</td>
<td>0.5 - 2.1</td>
</tr>
<tr>
<td>Other States</td>
<td>(NA)</td>
</tr>
<tr>
<td>Total</td>
<td>(X)</td>
</tr>
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</table>

### Modes of Transportation for Shipments Originating in Vermont

<table>
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<tr>
<th>Modes</th>
<th>Percent of value</th>
<th>Percent of weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parcel, U.S. Postal Service, or courier service</td>
<td>10.5 - 15.7</td>
<td>0.2 - 0.6</td>
</tr>
<tr>
<td>Truck (for-hire, private, and both private truck and for-hire truck)</td>
<td>70.0 - 79.8</td>
<td>89.8 - 101.2</td>
</tr>
<tr>
<td>Air (including truck and air)</td>
<td>4.0 - 13.2</td>
<td>(X)</td>
</tr>
<tr>
<td>Rail</td>
<td>0.5 - 1.1</td>
<td>(X)</td>
</tr>
<tr>
<td>Water (inland water, Great Lakes, deep sea, truck and water, and rail and water)</td>
<td>(X)</td>
<td>(X)</td>
</tr>
<tr>
<td>Pipeline*</td>
<td>(X)</td>
<td>(X)</td>
</tr>
<tr>
<td>Truck and rail intermodal combination</td>
<td>(X)</td>
<td>(X)</td>
</tr>
<tr>
<td>Other intermodal (truck and pipeline, inland and Gt. Lakes, inland and deep sea)</td>
<td>(X)</td>
<td>(X)</td>
</tr>
<tr>
<td>Other, unknown, and withheld for sampling and disclosure reasons</td>
<td>1.8 - 3.4</td>
<td>3.6 - 4.6</td>
</tr>
<tr>
<td>Total</td>
<td>(X)</td>
<td>(X)</td>
</tr>
</tbody>
</table>

### Domestic Distance Shipped for Commodities Originating in Vermont

<table>
<thead>
<tr>
<th>Distance</th>
<th>Percent of value</th>
<th>Percent of weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50 miles</td>
<td>14.6 - 22.5</td>
<td>65.6 - 77.2</td>
</tr>
<tr>
<td>50 to 99 miles</td>
<td>12.9 - 28.1</td>
<td>4.9 - 9.5</td>
</tr>
<tr>
<td>100 to 249 miles</td>
<td>11.3 - 18.5</td>
<td>4.5 - 13.1</td>
</tr>
<tr>
<td>250 to 499 miles</td>
<td>8.0 - 13.2</td>
<td>3.1 - 9.7</td>
</tr>
<tr>
<td>500 to 749 miles</td>
<td>5.9 - 9.5</td>
<td>1.4 - 3.4</td>
</tr>
<tr>
<td>750 to 999 miles</td>
<td>8.5 - 10.8</td>
<td>1.0 - 2.0</td>
</tr>
<tr>
<td>1,000 to 1,499 miles</td>
<td>3.2 - 6.2</td>
<td>0.5 - 1.9</td>
</tr>
<tr>
<td>1,500 to 1,999 miles</td>
<td>3.8 - 5.8</td>
<td>0.3 - 0.7</td>
</tr>
<tr>
<td>2,000 miles or more</td>
<td>5.8 - 11.8</td>
<td>0.4 - 0.8</td>
</tr>
<tr>
<td>Total</td>
<td>(X)</td>
<td>(X)</td>
</tr>
</tbody>
</table>

* CFS data for pipelines exclude most shipments of crude oil.
NA Not available.
X Not applicable.

NOTE: For explanation of 90-percent confidence intervals see Appendix B, "Reliability of the Data," in source document.

The Commodity Flow Survey (CFS) is a comprehensive effort to learn where and how goods are shipped in the U.S. The CFS measures shipments of commodities by establishments with paid employees and engaged in manufacturing, mining, wholesale trade, or selected retail and services industries. Prior commodity surveys covered shipments only by manufacturing firms. Commodity flows are estimated for a universe of approximately 900,000 establishments.

Data collected on individual shipments include total value, total weight, commodity type, modes of transport, domestic origin and destination; data for export shipments include the city and country of destination, mode and port of exit. Information is also be obtained on whether shipments are containerized or a hazardous material. Some firms provided data concerning on-site shipping facilities and access to shipping facilities, plus data on ownership and leasing of transportation equipment.

The CFS is conducted by the Bureau of the Census as part of the Economic Census. Funding and technical guidance is provided by the U.S. Department of Transportation. Initiated for 1993, the CFS is scheduled for 1997 and every 5 years thereafter for years ending in 2 and 7. Commodity surveys were conducted between 1963 and 1982, but data for 1982 were not published. No data were collected for 1987. Participants will report for a sample of shipments during a 2-week period each quarter during the reporting year.

The CFS is a mail-out/mail-back survey of 200,000 sampled employer establishments in selected industries. Establishments were selected by stratified sample, with strata based on geographic location and industry. Geographic strata are the 89 National Transportation Analysis Regions (NTARs), which provide nationwide coverage and are aggregations of Bureau of Economic Analysis economic areas. Within the strata, all establishments with annualized employment above a specified cutoff were selected with certainty, and the remaining smaller establishments were sampled with probability proportional to annualized payroll.

For 1993, each sampled establishment reported on a sample of individual shipments during a 2 week period in each calendar quarter. In addition, about 20,000 establishments will provide information on transportation facilities and arrangements in their final reporting period.

For further information about survey design and printed products, contact the Commodity Flow Survey Branch, Services Division, Bureau of the Census, Washington, DC 20233, or by calling 301/457-2805 or 2114. For information on related data programs and studies, contact the Bureau of Transportation Statistics at 202/366-DATA for voice, 202/366-3640 for fax, or CFS@BTS.GOV for e-mail.