Utah exported $17.4 billion in goods in 2023, contributing over $8.0 billion to the state’s gross domestic product, $16.7 billion to the state’s gross output (industry sales), and 71,891 jobs.
Table of Contents

Analysis in Brief ......................................................... 1
Summary ................................................................. 2
How Much and to Where Does Utah Export Goods? ...... 3
How Much and from Where Does Utah Import Goods? .... 4
What Impact Do Utah’s Exports Have on the Economy? .... 6
How Were the Impacts Calculated? ......................... 8

Figures
Figure 1: Top 25 Destinations of Utah’s International
Exports by Export Value, 2023 ................................. 2
Figure 2: Top Export Destinations in 2023, Shares in
2013 and 2023 ....................................................... 2
Figure 3: Share of Utah Goods Exports by Region,
2002–2023 ............................................................. 3
Figure 4: Value of Utah Goods Exports, 2002–2023 .......... 3
Figure 5: Gold Prices and Volume of Exports, 2002–2023 .... 3

Figure 6: Top 25 Origins of Utah’s International Imports
by Value, 2023 ......................................................... 5
Figure 7: Top Import Origins in 2023, Shares in
2013 and 2023 ......................................................... 5
Figure 8: Top 10 Exports in 2023, Shares in 2013 and 2023 .... 6
Figure 9: Top 10 Imports in 2023, Shares in 2013 and 2023 .... 7

Tables
Table 1: Utah’s International Goods Exports, 2002–2023 ....... 4
Table 2: Utah’s International Goods Imports, 2008–2023 ...... 5
Table 3: Utah’s International Goods Trade Balance,
2008–2023 ............................................................ 6
Table 4: Utah’s Goods Exports by Three-Digit
NAICS Code, 2023 ................................................. 7
Table 5: Estimated Economic Impacts of Utah’s Goods
Exports, 2023 ......................................................... 8
Utah International Trade, 2023

Analysis in Brief

Utah’s $17.4 billion of international goods exports in 2023 generated over $4.0 billion in earnings and 71,891 jobs, and contributed over $8.0 billion to the state’s gross domestic product (GDP) and $16.7 billion to the state’s gross output (industry sales). The state exported goods to 200 countries and imported goods from 151 countries. The value of Utah’s exports was 8% higher in 2023 than in 2013 (before adjusting for inflation), with gold exports 14% lower and non-gold exports 124% higher. Over the same period, the total value of all U.S. goods exports increased by 28%. Utah’s imports grew 75% between 2013 and 2023 (before adjusting for inflation), with gold imports 20% lower and non-gold imports 124% higher. U.S. goods imports increased 36% over the same period.

Key Findings

- **Utah exported $17.4 billion to 200 countries** – Utah’s merchandise exports tallied $17.4 billion in 2023 and shipped to 200 countries. The state’s 2023 exports increased $796 million over 2022, a 4.8% increase.

- **Utah’s largest trading partners** – The United Kingdom, by far, received the largest value of Utah exports at $7.2 billion in 2023 or 41.2%. Approximately $6.8 billion of the exports to the UK stem from unwrought gold. Canada at $1.7 billion, Mexico at $1.3 billion, China at $1.2 billion, and Japan at $0.8 billion round out Utah’s top five trading partners.

- **Primary metals Utah’s largest export** – Primary metal manufacturing contributed 41.4% of Utah’s total exports and $7.2 billion in value. Computer and electronic products came in a distant second largest export at $2.1 billion (11.9%), followed by chemicals at $1.5 billion (8.6%).

- **Gold serves primary role** – Unwrought gold, almost exclusively exported to the United Kingdom, represented 39.9% of all Utah exports. Utah export values rise and fall because of variations in both the volume of gold exported and the price of gold.

- **Utah export growth lagged the nation** – Over the last decade (2013 to 2023), Utah exports increased by 7.9%, compared with a national increase of 27.9%.

- **Utah imported $18.6 billion from 151 countries** – Utah’s merchandise imports totaled $18.6 billion in 2023 and shipped from 151 countries. This led to a goods trade deficit of $1.2 billion.

- **Economic impact** – Utah exports in 2023 created an estimated $8.0 billion in GDP, $4.0 billion in earnings, $16.7 billion in output and 71,891 jobs. These impacts represent 2.9% of GDP, 2.6% of earnings, 3.6% of output, and 3.0% of total employment in Utah.
Summary

Utah’s $17.4 billion of international goods exports in 2023 generated over $4.0 billion in earnings and 71,891 jobs, and contributed over $8.0 billion to the state’s gross domestic product (GDP) and $16.7 billion to the state’s gross output. These impacts represented 2.6% of total earnings in the state, 3.0% of total employment, 2.9% of total GDP, and 3.6% of gross output.

Computer and electronic products exports contributed $911.4 million in earnings, 13,618 jobs, $3.0 billion in output, and $1.9 billion in GDP. Miscellaneous manufactured commodities exports—mostly medical equipment and supplies—supported $482.7 million in earnings, 8,344 jobs, $1.9 billion in output, and $992.0 million in GDP.

The value of Utah’s exports was 8% higher in 2023 than in 2013 (before adjusting for inflation), with gold exports 14% lower and non-gold exports 30% higher. Over the same period, the total value of all U.S. goods exports increased by 28%.

In 2023, Utah imported $18.6 billion worth of goods from 151 countries, leading to a goods trade deficit of $1.2 billion. The top countries exporting goods to Utah in 2023 include Mexico at $4.9 billion (nearly $1.7 billion of which was unwrought gold), Canada at $3.1 billion and China at $2.7 billion.

This research brief updates a previous analysis by the Kem C. Gardner Policy Institute of Utah’s international goods exports in 2014 with data for 2023. The brief estimates exports’ combined direct, indirect and induced economic impacts and examines changes since 2014.

Figure 2: Top Export Destinations in 2023, Shares in 2013 and 2023
(Share of Total Export Value)

Source: U.S. Census Bureau, USA Trade Online

Source: U.S. Census Bureau, USA Trade Online
In 2023, Utah exported $17.4 billion worth of goods to 200 countries. These exports represented roughly 1.4% of the state's GDP. Countries importing goods from Utah in 2023 ranged from the United Kingdom at $7.1 billion (over $6.8 billion of which was unwrought gold), to the Faroe Islands, which purchased $2,870 of pump parts. Figure 1 shows the top 25 destination countries of the state's 2023 exports. The United Kingdom dominates due to its receipt of 99% of the state's exported gold. Just two countries, the United Kingdom and Canada, accounted for half of the value of Utah's exports in 2023, with the U.K. alone capturing over 40%. In 2013, two countries—China (including Hong Kong) and Canada—received half of Utah's merchandise exports (Figure 2).

A regional analysis shows that while the Asian market grew in importance for Utah from 2002 to 2013 at the expense of Europe, the trend reversed through 2020. However, since 2020, Asia's share of Utah's exports has slowly begun to increase again, while Europe's has shrunk (Figure 3).

Utah's largest exports by value in 2023 were unwrought gold at $6.9 billion, civilian aircraft, engines and parts at $567.2 million, and medical needles, catheters and parts at $501.2 million. By way of comparison, the state's top exports in 2013 were unwrought gold ($8.1 billion in 2013 dollars), electronic integrated circuit memory ($1.5 billion), and certain food preparations ($522.9 million).

Figure 4 and Table 1 show the growth in Utah's goods exports between 2002 and 2023, in inflation-adjusted 2023 dollars. The total value of the state's exports grew 33.5% in real terms over this period, from $13.0 billion to $17.4 billion, with most of the growth occurring from 2002 to 2015. Exports excluding gold grew 34.0% over the period.
Gold increased steadily between 2002 and 2015 from $3.7 billion to $9.7 billion, averaging 7.9% annual growth. However, since 2015, non-gold exports have increased only 1.2% annually to $10.4 billion. Gold exports have been quite volatile, due largely to variations in the volume (troy ounces) exported (Figure 5). Adjusting for inflation, the value of gold exports was 25% lower in 2023 than in 2002 and 36% lower than in 2013. The 3.7 million troy ounces of gold exported in 2023 was 37% below the volume in 2002, 35% below the volume in 2013, and 24% below the 2002–2023 average of 5.0 million troy ounces.

The Census Bureau’s export data reflect the state from which the goods begin their journey to the port of export. There are a couple of cases where this may not coincide with the state that produced the goods. Some shipments are consolidated in a state other than the producing state before being exported. Non-manufactured goods may be stored by central offices or intermediaries in another state before being exported. The result is that the value of these exports is understated for the producing states and overstated for the consolidating or central office states. These cases primarily affect agricultural products and natural resources like oil and gas, which together represented only 3.3% of the value of Utah’s exports in 2023.

How Much and from Where Does Utah Import Goods?

In 2023, Utah imported $18.6 billion worth of goods from 151 countries. Countries exporting goods to Utah in 2023 ranged from Mexico at $4.9 billion (nearly $1.7 billion of which was unwrought gold), to Kuwait, which supplied $1,025 in women’s and girls’ clothing. Figure 6 shows the top 25 origin countries of the state’s 2023 goods imports. Mexico is the largest, followed by Canada and China. These were also the top three origin countries in 2013, although their shares and orders have changed. The three countries accounted for 57% of the value of Utah’s imports in 2023, with Mexico alone supplying 26% (Figure 7). In 2013 they provided 66% of Utah’s merchandise imports, with Mexico supplying almost 33%.

Utah’s largest imports by value in 2023 were unwrought gold at $2.8 billion; parts and accessories for automatic data processing machines at $755.6 million; and machines for the reception, conversion and transmission of voice, images or other data at $663.1 million. Exported articles that were returned accounted for $956.2 million of Utah’s 2023 imports. By way of comparison, the state’s top imports in 2013 were unwrought gold ($3.5 billion in 2013 dollars), unwrought silver ($848.0 million), and

Table 1: Utah’s International Goods Exports, 2002–2023
(Billions of Constant 2023 Dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Utah Commodity Exports</th>
<th>Gold, Nonmonetary, Unwrought</th>
<th>Total Excluding Gold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Value</td>
<td>Value</td>
</tr>
<tr>
<td></td>
<td>Share of U.S.</td>
<td>Share of Utah</td>
<td>Volume (millions of troy oz.)</td>
</tr>
<tr>
<td>2002</td>
<td>$13.0</td>
<td>$9.3</td>
<td>71.2%</td>
</tr>
<tr>
<td>2003</td>
<td>$9.8</td>
<td>$6.1</td>
<td>62.3%</td>
</tr>
<tr>
<td>2004</td>
<td>$9.9</td>
<td>$5.6</td>
<td>56.3%</td>
</tr>
<tr>
<td>2005</td>
<td>$12.3</td>
<td>$7.1</td>
<td>57.7%</td>
</tr>
<tr>
<td>2006</td>
<td>$12.2</td>
<td>$7.1</td>
<td>58.0%</td>
</tr>
<tr>
<td>2007</td>
<td>$12.8</td>
<td>$7.1</td>
<td>55.8%</td>
</tr>
<tr>
<td>2008</td>
<td>$16.3</td>
<td>$9.3</td>
<td>57.0%</td>
</tr>
<tr>
<td>2009</td>
<td>$16.6</td>
<td>$10.2</td>
<td>61.1%</td>
</tr>
<tr>
<td>2010</td>
<td>$19.1</td>
<td>$11.5</td>
<td>59.9%</td>
</tr>
<tr>
<td>2011</td>
<td>$21.9</td>
<td>$14.1</td>
<td>64.4%</td>
</tr>
<tr>
<td>2012</td>
<td>$21.5</td>
<td>$13.4</td>
<td>62.6%</td>
</tr>
<tr>
<td>2013</td>
<td>$19.5</td>
<td>$10.8</td>
<td>55.3%</td>
</tr>
<tr>
<td>2014</td>
<td>$15.0</td>
<td>$5.6</td>
<td>37.6%</td>
</tr>
<tr>
<td>2015</td>
<td>$18.1</td>
<td>$8.5</td>
<td>46.7%</td>
</tr>
<tr>
<td>2016</td>
<td>$16.3</td>
<td>$7.0</td>
<td>43.0%</td>
</tr>
<tr>
<td>2017</td>
<td>$15.1</td>
<td>$5.6</td>
<td>37.2%</td>
</tr>
<tr>
<td>2018</td>
<td>$18.9</td>
<td>$9.3</td>
<td>49.5%</td>
</tr>
<tr>
<td>2019</td>
<td>$22.3</td>
<td>$12.4</td>
<td>55.6%</td>
</tr>
<tr>
<td>2020</td>
<td>$20.4</td>
<td>$9.7</td>
<td>47.3%</td>
</tr>
<tr>
<td>2021</td>
<td>$19.5</td>
<td>$9.0</td>
<td>46.3%</td>
</tr>
<tr>
<td>2022</td>
<td>$16.7</td>
<td>$7.5</td>
<td>44.9%</td>
</tr>
<tr>
<td>2023</td>
<td>$17.4</td>
<td>$6.9</td>
<td>39.9%</td>
</tr>
</tbody>
</table>

Notes: All export values except gold were adjusted using BEA’s price index for exports of goods. Inflation-adjusted gold values were calculated using the PPI for gold. Source: U.S. Census Bureau, USA Trade Online.
Table 2: Utah's International Goods Imports, 2008–2023
(Billions of Constant 2023 Dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total UT Goods Imports</th>
<th>Gold, Nonmonetary, Unwrought</th>
<th>Total Excluding Gold</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Share of U.S. Value</td>
<td>Share of UT</td>
</tr>
<tr>
<td>2008</td>
<td>$7.3</td>
<td>0.4%</td>
<td>$2.1</td>
</tr>
<tr>
<td>2009</td>
<td>$9.2</td>
<td>0.5%</td>
<td>$4.4</td>
</tr>
<tr>
<td>2010</td>
<td>$10.1</td>
<td>0.5%</td>
<td>$4.6</td>
</tr>
<tr>
<td>2011</td>
<td>$11.6</td>
<td>0.6%</td>
<td>$5.2</td>
</tr>
<tr>
<td>2012</td>
<td>$11.4</td>
<td>0.5%</td>
<td>$5.1</td>
</tr>
<tr>
<td>2013</td>
<td>$11.6</td>
<td>0.5%</td>
<td>$4.8</td>
</tr>
<tr>
<td>2014</td>
<td>$12.6</td>
<td>0.5%</td>
<td>$5.0</td>
</tr>
<tr>
<td>2015</td>
<td>$14.8</td>
<td>0.6%</td>
<td>$5.1</td>
</tr>
<tr>
<td>2016</td>
<td>$16.2</td>
<td>0.7%</td>
<td>$6.1</td>
</tr>
<tr>
<td>2017</td>
<td>$17.3</td>
<td>0.7%</td>
<td>$7.0</td>
</tr>
<tr>
<td>2018</td>
<td>$18.1</td>
<td>0.7%</td>
<td>$6.4</td>
</tr>
<tr>
<td>2019</td>
<td>$17.7</td>
<td>0.7%</td>
<td>$5.2</td>
</tr>
<tr>
<td>2020</td>
<td>$17.3</td>
<td>0.7%</td>
<td>$3.3</td>
</tr>
<tr>
<td>2021</td>
<td>$19.0</td>
<td>0.6%</td>
<td>$3.3</td>
</tr>
<tr>
<td>2022</td>
<td>$18.9</td>
<td>0.6%</td>
<td>$3.3</td>
</tr>
<tr>
<td>2023</td>
<td>$18.6</td>
<td>0.6%</td>
<td>$2.9</td>
</tr>
</tbody>
</table>

Note: All import values except gold were adjusted using BEA's price index for imports of goods. Inflation-adjusted gold values were calculated using the PPI for gold.
Source: U.S. Census Bureau, USA Trade Online
the volume of gold imported has varied considerably, between about 2.0 million and 8.0 million troy ounces.

Subtracting the nominal value of imports from that of exports gives Utah's international trade balance for goods each year (see Table 3). The state had a trade surplus for total goods in 10 of the 16 years from 2008 through 2023, averaging $4.1 billion before adjusting for inflation. However, for the last three years the state has run a trade deficit, with total exports ranging from almost $19.0 million to $2.5 billion less than total imports. Utah also experienced trade deficits in 2016 through 2018. Subtracting gold from the equation and considering only non-gold exports and imports, the state has consistently run a trade deficit since 2015, which grew from $852.5 million in 2015 to $5.3 billion in 2023.

What Impact Do Utah’s Exports Have on the Economy?

Table 4 shows the value of Utah's 2023 goods exports by three-digit NAICS commodity. Primary metal manufacturing was by far the largest export by value. Most of this, $6.9 billion of the $7.2 billion, was unwrought gold; and most of that gold was imported into Utah, processed, then exported. The next largest exports were computer and electronic products, chemicals, miscellaneous manufactured commodities, and transportation equipment.

Some goods saw significant changes in their share of total exports between 2013 and 2023. Most notably, primary metal manufacturing decreased from 51.7% of total export value to 41.4%, and computer and electronic products shrunk from 16.6% to 11.9%. In addition, miscellaneous manufactured commodities—most of which were medical equipment and supplies—increased their share from 3.7% to 7.9%, and chemicals grew from 5.2% to 8.6% (see Figure 8).

On the imports side, there were also some significant changes. Primary metal manufacturing (mostly gold) shrank from 35.0% to 11.9%, and computer and electronic products shrank from 16.6% to 11.9%. In addition, miscellaneous manufactured commodities—most of which were medical equipment and supplies—increased their share from 3.7% to 7.9%, and chemicals grew from 5.2% to 8.6% (see Figure 8).
Table 4: Utah's Goods Exports by Three-Digit NAICS Code, 2023

<table>
<thead>
<tr>
<th>NAICS</th>
<th>Commodity</th>
<th>2023 Value</th>
<th>2023 Share</th>
<th>2013 Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>331</td>
<td>Primary Metal Manufacturing</td>
<td>$7,202,077,673</td>
<td>41.42%</td>
<td>51.65%</td>
</tr>
<tr>
<td>334</td>
<td>Computer &amp; Electronic Products</td>
<td>$2,069,986,527</td>
<td>11.90%</td>
<td>16.64%</td>
</tr>
<tr>
<td>325</td>
<td>Chemicals</td>
<td>$1,496,470,971</td>
<td>8.61%</td>
<td>5.15%</td>
</tr>
<tr>
<td>339</td>
<td>Miscellaneous Manufactured Commodities</td>
<td>$1,374,651,874</td>
<td>7.91%</td>
<td>3.70%</td>
</tr>
<tr>
<td>336</td>
<td>Transportation Equipment</td>
<td>$1,099,976,199</td>
<td>6.33%</td>
<td>4.98%</td>
</tr>
<tr>
<td>311</td>
<td>Food &amp; Kindred Products</td>
<td>$1,035,533,131</td>
<td>5.96%</td>
<td>5.93%</td>
</tr>
<tr>
<td>333</td>
<td>Machinery, Except Electrical</td>
<td>$757,715,319</td>
<td>4.36%</td>
<td>3.24%</td>
</tr>
<tr>
<td>212</td>
<td>Minerals &amp; Ores</td>
<td>$467,354,379</td>
<td>2.69%</td>
<td>1.07%</td>
</tr>
<tr>
<td>335</td>
<td>Electrical Equipment, Appliances &amp; Components</td>
<td>$464,006,053</td>
<td>2.67%</td>
<td>1.66%</td>
</tr>
<tr>
<td>332</td>
<td>Fabricated Metal Products, NESOI</td>
<td>$338,828,276</td>
<td>1.95%</td>
<td>1.44%</td>
</tr>
<tr>
<td>326</td>
<td>Plastics &amp; Rubber Products</td>
<td>$287,415,874</td>
<td>1.65%</td>
<td>1.16%</td>
</tr>
<tr>
<td>910</td>
<td>Waste &amp; Scrap</td>
<td>$207,553,487</td>
<td>1.19%</td>
<td>0.88%</td>
</tr>
<tr>
<td>313</td>
<td>Textiles &amp; Fabrics</td>
<td>$92,069,179</td>
<td>0.53%</td>
<td>0.07%</td>
</tr>
<tr>
<td>111</td>
<td>Agricultural Products</td>
<td>$77,376,885</td>
<td>0.44%</td>
<td>0.38%</td>
</tr>
<tr>
<td>312</td>
<td>Beverages &amp; Tobacco Products</td>
<td>$56,072,722</td>
<td>0.32%</td>
<td>0.12%</td>
</tr>
<tr>
<td>322</td>
<td>Paper</td>
<td>$54,124,518</td>
<td>0.31%</td>
<td>0.17%</td>
</tr>
<tr>
<td>900</td>
<td>Other Special Classification Provisions</td>
<td>$48,409,677</td>
<td>0.28%</td>
<td>0.24%</td>
</tr>
<tr>
<td>314</td>
<td>Textile Mill Products</td>
<td>$37,186,501</td>
<td>0.21%</td>
<td>0.12%</td>
</tr>
<tr>
<td>337</td>
<td>Furniture &amp; Fixtures</td>
<td>$36,366,917</td>
<td>0.21%</td>
<td>0.20%</td>
</tr>
<tr>
<td>315</td>
<td>Apparel &amp; Accessories</td>
<td>$29,311,054</td>
<td>0.17%</td>
<td>0.07%</td>
</tr>
<tr>
<td>327</td>
<td>Nonmetallic Mineral Products</td>
<td>$29,168,882</td>
<td>0.17%</td>
<td>0.19%</td>
</tr>
<tr>
<td>930</td>
<td>Used or Second-Hand Merchandise</td>
<td>$27,208,427</td>
<td>0.16%</td>
<td>0.23%</td>
</tr>
<tr>
<td>316</td>
<td>Leather &amp; Allied Products</td>
<td>$24,336,266</td>
<td>0.14%</td>
<td>0.12%</td>
</tr>
<tr>
<td>112</td>
<td>Livestock &amp; Livestock Products</td>
<td>$23,288,471</td>
<td>0.13%</td>
<td>0.04%</td>
</tr>
<tr>
<td>323</td>
<td>Printed Matter and Related Products, NESOI</td>
<td>$21,457,761</td>
<td>0.12%</td>
<td>0.14%</td>
</tr>
<tr>
<td>324</td>
<td>Petroleum &amp; Coal Products</td>
<td>$13,197,180</td>
<td>0.08%</td>
<td>0.08%</td>
</tr>
<tr>
<td>321</td>
<td>Wood Products</td>
<td>$11,848,759</td>
<td>0.07%</td>
<td>0.02%</td>
</tr>
<tr>
<td>113</td>
<td>Forestry Products, NESOI</td>
<td>$3,075,763</td>
<td>0.02%</td>
<td>0.01%</td>
</tr>
<tr>
<td>114</td>
<td>Fish, Fresh/Chilled/Frozen &amp; Other Marine Products</td>
<td>$1,913,193</td>
<td>0.01%</td>
<td>0.01%</td>
</tr>
<tr>
<td>980</td>
<td>Goods Returned (exports for Canada Only)</td>
<td>$145,584</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>211</td>
<td>Oil &amp; Gas</td>
<td>$8,758</td>
<td>0.00%</td>
<td>0.30%</td>
</tr>
</tbody>
</table>

All Commodities: $17,388,136,260

Figure 9: Top 10 Imports in 2023, Shares in 2013 and 2023

of the value of imports in 2013 to 21.9% in 2023. Computer and electronic products increased from 5.8% of imports in 2013 to 14.2% in 2023. There were also notable changes in the shares represented by transportation equipment, machinery (except electrical), and electrical equipment, appliances and components (see Figure 9).

Utah's international goods exports in 2023 supported over $4.0 billion in earnings and 71,891 jobs, and contributed over $8.0 billion to the state's gross domestic product (value added) and $16.7 billion in output (industry sales). These impacts represented 2.6% of total earnings in the state, 3.0% of total employment, 2.9% of total GDP and 3.6% of total output (Table 5).a

In 2014, the impacts of exports represented 4.8% of statewide earnings, 5.3% of jobs, and 5.4% of the state's GDP. Output impacts are not available for 2014 exports. The reduction in the relative significance of export impacts was driven by a combination of factors. On one hand, while the total value of exports was 43% higher in 2023 than in 2014 (before adjusting for inflation), the state's GDP and total earnings each grew by approximately 90% and employment grew by 34%. On the other hand, of 28 commodity groups, the earnings multiplier shrank for 20 groups, the employment multiplier shrank for 26 groups, and the value-added/GDP multiplier shrank for 19 groups. On average, earnings and value-added multipliers were 7% smaller and employment multipliers were 28% smaller than in 2014. This implies both a shortening of local supply chains and increasing labor productivity in these commodity groups. If producers are purchasing more of their inputs from out-of-state suppliers and fewer workers are required to produce the same amount of output as in 2014, then the economic impact multipliers will shrink.
The largest impacts in 2023 were from exports of computer and electronic products, which contributed $911.4 million in earnings, 13,618 jobs, $1,917.2 million in value-added, and $3,023.2 million in output. Exports of chemicals generated $485.9 million in earnings, 7,928 jobs, $1,003.5 million in value-added, and $2,208.6 million in output. Miscellaneous manufactured commodities exports supported $482.7 million in earnings, 8,344 jobs, $992.0 million in value-added, and $1,860.8 million in output. Transportation equipment exports generated $476.6 million in earnings, 7,595 jobs, $880.0 million in value-added, and $2,000.9 million in output. Food & Kindred Products exports supported $445.4 million in earnings, 11,043 jobs, $791.9 million in value-added, and $2,100.7 million in output. Machinery, Except Electrical generated $279.3 million in earnings, 4,567 jobs, $530.8 million in value-added, and $1,182.0 million in output. Primary Metal Manufacturing exports were $246.4 million in earnings, 4,095 jobs, $456.1 million in value-added, and $1,181.4 million in output. Electrical equipment, Appliances & Components generated $146.5 million in earnings, 2,304 jobs, $314.0 million in value-added, and $673.6 million in output. Fabricated Metal Products, NESOI were $144.4 million in earnings, 2,672 jobs, $259.9 million in value-added, and $564.9 million in output.

How Were the Impacts Calculated?

The Gardner Institute used RIMS II multipliers, published by the Bureau of Economic Analysis, to estimate the economic impacts of the state's goods exports. These multipliers account for backward linkages in the state's economy. That is, an exporting firm purchases inputs from local suppliers, including labor from residents, in order to produce its output. These suppliers in turn purchase labor and inputs from other local suppliers. In addition, the workers at the exporting firm and the upstream firms spend a portion of their earnings in-state on goods and services. Together, these activities constitute the multiplier effect.

Estimating the economic impacts of gold exports presents a problem. Simply applying final demand multipliers to the value of gold exports yields total economic impacts of $2.7 billion in earnings, 44,821 jobs, and $5.0 billion in state GDP. Given that most of this gold is imported and only processed here and there...
are only two gold refiners in the state, each with fewer than 250 employees, these impacts are clearly too high. Therefore, we used an alternative approach to estimate the impacts of gold.

Utah produced 144,863 troy ounces of gold worth approximately $261 million in 2022 (the most recent data available) from three mines: Rio Tinto Kennecott’s Bingham Canyon mine, Tintic Consolidated Metals’ Trixie mine, and Desert Hawk Gold’s Kiewit mine.10 Kennecott refines the gold, silver and other precious metals produced as a byproduct of its copper refining in the company’s precious metals plant in Magna, Utah. Assuming gold production in Utah was the same as in 2022 and all locally produced gold is refined in state, at the 2023 average price of $1,940 per ounce this results in $281.1 million of gold produced and exported from Utah, generating $109.2 million in earnings, 1,814 jobs, and $202.0 million in state GDP.

The Asahi gold and silver refining plant in Salt Lake City processes the large quantities of gold that the state imports (2.2 million troy ounces worth $2.9 billion in 2023). According to the Department of Workforce Services, the Asahi facility employs between 100 and 249 people. We used RIMS multipliers to estimate the sales (final demand) associated with a known number of jobs in a particular industry. Assuming 175 jobs at Asahi yields estimated sales (exports) of $98.0 million, which in turn generate total impacts of $38.1 million in earnings, 632 jobs, and $70.4 million in state GDP.

These two sets of gold refining impacts were added to the impacts calculated on the remaining $255.5 million of non-gold primary metal manufacturing, with Table 3 showing the total impacts for the sector.

There is not a single multiplier for transportation equipment, even in the aggregated RIMS multipliers. Delving into the more detailed, four-digit NAICS export data revealed that in 2023 this commodity comprised $463.8 million of motor vehicles, their bodies, trailers and parts and $636.2 million of aerospace products and parts, railroad rolling stock, ships and boats, and other transportation equipment. These correspond to the RIMS multipliers for motor vehicle, body, trailer and parts manufacturing and for other transportation equipment manufacturing, respectively.

Before applying multipliers, export values were reduced to reflect the producer’s share of the reported amount, that is, the portion received by the producer of the good. The BEA provides a table showing the composition of the purchase price of exported commodities. The “purchaser value” consists of the “producer value” plus any transportation costs and wholesale margins to deliver the good to the purchaser. For each exported commodity, we calculated the producer’s share of the purchaser value and multiplied that by the value of the export reported by the Census Bureau. We then applied the RIMS multipliers to these adjusted export amounts. Exports of waste and scrap, used or second-hand merchandise, goods returned, and “other special classification provisions”—totaling $283.3 million—were not included as there are no multipliers for these categories. However, the remaining goods represent 98.4% of the total value of exports in 2023.

Utah’s international goods exports increase earnings, jobs, output and GDP for the state. While the impacts of exports have decreased in importance as the state’s economy has grown, they remain an important source of outside dollars flowing into the state.

Endnotes
2. The analysis uses U.S. Census Bureau data on merchandise exports by state. Unfortunately, there are no official data on state-level exports of services. This analysis is confined to the impacts of goods exports only.
3. Based on the estimated value-added portion of the exports, after removing transportation and wholesale costs involved in placing the goods alongside the ship or airplane at the port of export.
4. These goods are based on the Harmonized System (HS) classification of commodities at the six-digit level. This provides more specific descriptions of exports than the more aggregated, three-digit North American Industry Classification System (NAICS) used elsewhere in this analysis. The HS-based data are also the source of information on exports of gold, which are included in NAICS 331 primary metal manufacturing. Export data by NAICS sector were used because the economic impact multipliers are organized by NAICS sector.
5. Gold export values were adjusted using the producer price index (PPI) for gold reported by the U.S. Bureau of Labor Statistics. Gold PPI values were not reported for 2022 and 2023; the Gardner Institute estimated them using the corresponding annual increases in the London gold price, afternoon fixing, as reported by Deutsche Bundesbank. The values of all other imports were adjusted using the Bureau of Economic Analysis’ price index for imports of goods.
6. These goods are based on the Harmonized System (HS) classification of commodities at the six-digit level. This provides more specific descriptions of imports than the more aggregated, three-digit North American Industry Classification System (NAICS) used elsewhere in this analysis. The HS-based data are also the source of information on imports of gold, which are included in NAICS 331 primary metal manufacturing.
7. Gold import values were adjusted using the producer price index (PPI) for gold reported by the U.S. Bureau of Labor Statistics. Gold PPI values were not reported for 2022 and 2023; the Gardner Institute estimated them using the corresponding annual increases in the London gold price, afternoon fixing, as reported by Deutsche Bundesbank. The values of all other imports were adjusted using the Bureau of Economic Analysis’ price index for imports of goods.
8. The earnings and GDP shares are based on 2023 total earnings and state GDP from the U.S. Bureau of Economic Analysis. The output share is based on the REMI PIn+ model’s estimate of Utah’s 2023 gross output. The Gardner Institute estimated total employment by multiplying 2023 total employment from the Utah Department of Workforce Services by the 2022 ratio of BEA total employment to DWS total employment. BEA job counts include the self-employed, while DWS counts only employees of companies.
9. These impacts comprise direct, indirect and induced effects. Output impacts in 2014 are not available.
Partners in the Community

The following individuals and entities help support the research mission of the Kem C. Gardner Policy Institute.

Legacy Partners
The Gardner Company
Christian and Marie Gardner Family
Intermountain Health
Clark and Christine Ivory Foundation
KSL and Deseret News
Larry H. & Gail Miller Family Foundation
Mountain America Credit Union
Salt Lake City Corporation
Salt Lake County
University of Utah Health
Utah Governor’s Office of Economic Opportunity
WCF Insurance
Zions Bank

Executive Partners
The Boyer Company
Clyde Companies

Sustaining Partners
Dominion Energy
Salt Lake Chamber
Staker Parson Materials and Construction
Wells Fargo

Kem C. Gardner Policy Institute Advisory Board

Conveners
Michael O. Leavitt
Mitt Romney

Board
Scott Anderson, Co-Chair
Gail Miller, Co-Chair
Doug Anderson
Deborah Bayle
Roger Boyer
Michelle Camacho
Sophia M. DiCaro
Cameron Diehl
Lisa Eccles
Spencer P. Eccles
Christian Gardner
Kem C. Gardner
Kimberly Gardner
Natalie Gochnour
Brandy Grace
Jeremy Hafen
Rachel Hayes
Clark Ivory
Mike S. Leavitt
Derek Miller
Ann Millner
Sterling Nielsen
Jason Perry
Ray Pickup
Gary B. Porter
Taylor Randall
Jill Remington Love
Brad Rencher
Josh Romney
Charles W. Sorenson
James Lee Sorenson
Vicki Varela

Ex Officio (invited)
Governor Spencer Cox
Speaker Mike Schultz
Senate President Stuart Adams
Representative Angela Romero
Senator Luz Escamilla
Mayor Jenny Wilson
Mayor Erin Mendenhall

Kem C. Gardner Policy Institute Staff and Advisors

Leadership Team
Natalie Gochnour, Associate Dean and Director
Jennifer Robinson, Chief of Staff
Mallory Bateman, Director of Demographic Research
Phil Dean, Chief Economist and Senior Research Fellow
Shelley Kruger, Accounting and Finance Manager
Colleen Larson, Administrative Manager
Nate Lloyd, Director of Economic Research
Dianne Meppen, Director of Community Research
Laura Summers, Director of Industry Research
Nicholas Thiriot, Communications Director
James A. Wood, Ivy-Boyer Senior Fellow
Michael T. Hogue, Senior Research Statistician
Mike Hollingshaus, Senior Demographer
Thomas Holst, Senior Energy Analyst
Madeleine Jones, Dignity Index Field Director
Jennifer Leaver, Senior Tourism Analyst
Maddy Oritt, Senior Public Finance Economist
Heidi Prior, Public Policy Analyst
Shannon Simonsen, Research Coordinator
Paul Springer, Senior Graphic Designer

Staff
Eric Albers, Senior Natural Resources Policy Analyst
Samantha Ball, Senior Research Associate
Parker Banta, Public Policy Analyst
Melanie Beagley, Public Policy Analyst
Preston Brightwell, Dignity Index Field Director
Andrea Thomas Brandley, Senior Education Analyst
Kara Ann Byrne, Senior Research Associate
Mike Christensen, Scholar-in-Residence
Nate Christensen, Research Economist
Moira Dillow, Housing, Construction, and Real Estate Analyst
John C. Downen, Senior Research Fellow
Dejan Eskic, Senior Research Fellow and Scholar
Chance Hansen, Communications Specialist
Emily Harris, Senior Demographer

Faculty Advisors
Matt Burbank, College of Social and Behavioral Science
Elena Patel, David Eccles School of Business
Nathan Seegert, David Eccles School of Business

Senior Advisors
Jonathan Ball, Office of the Legislative Fiscal Analyst
Silvia Castro, Suazo Business Center
Gary Cornia, Marriott School of Business
Emma Houston, University of Utah
Beth Jarosz, Population Reference Bureau
Darin Mellott, CBRE
Pamela S. Perlich, University of Utah
Chris Redgrave, Community-at-Large
Juliette Tennert, Community-at-Large