



# Export Trends in Washington State: Volume 7

## Abstract

Accurate descriptions of export trends are needed so industry representatives, analysts, policymakers, and business owners can properly assess market conditions. This fact sheet provides data on manufactured and processed agricultural exports from Washington State to foreign markets for industries including aerospace products, petroleum and coal products, navigational instruments, paper products, basic chemicals, other machinery, and fruit and vegetable preserves. The data here can be used to compare export changes over time.

This is the seventh edition of an annual series, and includes data on both exports and imports, as well as new data on the number of countries from which Washington imports goods and the mode of transportation of those imports. Washington increased exports in 2013, continuing the export growth trend that started in 2011. However, the increase in statewide exports is almost exclusively due to an increase in exports from the aerospace industry. The data also show that the leading import industries are often the leading export industries.

## Introduction

This fact sheet includes data that depict trends in Washington exports from 2002 to 2013, and imports from 2008 to 2013 by industry. The data are presented as an inflation-adjusted time series, which allows values to be compared over time. These figures also emphasize the relationships between the export activity of Washington's individual industries and its overall state-level exporting activity. The industries discussed include some of the largest in the state: aerospace products and parts, petroleum and coal products, navigational instruments, paper products, basic chemicals, and other machinery. Special attention is given to the processed agricultural products industries: fruit and vegetable preserves, grain and oilseed milling products, meat products, and dairy products. Readers interested in seeing the sub-industries that make up each category should visit the [North American Industry Classification System](#) (NAICS) website, which is administered by the United States Census Bureau, and click on the 2012 NAICS search button.

This volume of *Export Trends in Washington State* is the seventh fact sheet in a series of WSU Extension publications providing information on Washington exports and imports. New features include 2013 export and import data, and figures showing the trend in the number of countries Washington imports goods from, along with the transportation mode for those imports.

The [World Institute for Strategic Economic Research](#) (WISERTrade) is the source for Washington's exports and imports data. The key feature of the WISERTrade state-level export data is its focus on the location from which exporting begins (origin of movement state), rather than on the location from which exported goods are produced (production state).

This fact has important implications for the accuracy of data interpretation and conclusions. A discussion of these implications can be found in [The Collection and Description of Washington State Export Data](#) (Cassey 2010). Also included is a description of the process by which the Washington State export data used in this series are collected as well as interpretation limitations and definitions for many technical terms.

Import data are collected at the US port of entry and the statistics are credited to the state that is the importer of record. Therefore, the import data are likely overestimates of the amount of foreign goods used for production or consumption in Washington since intermediary buyers in Washington could sell these imports to other states. However, if the overestimating remains constant over time, the import data will show trends accurately.

Though the export data for the origin-of-movement state and import data for the port-of-entry state are only available for purchase, interested readers may obtain some Washington State trade data at no cost from TradeStats Express (<http://tse.export.gov/>). In this fact sheet, all nominal data have been adjusted for inflation using the annual values from the Consumer Price Index (CPI) for the Seattle-Tacoma-Bremerton area. (These CPI data are for all urban consumers for all items, except food and energy, and are available from the [Bureau of Labor Statistics](#) [BLS] Series ID: CUUSA423SA0L1E). The base year used is the 1982–1984 average. This base year is the standard used by the BLS. This means that the dollar value of the data provided corresponds to the average value of the dollar from 1982 to 1984.

# Washington Inflation-Adjusted Export Patterns in Total and by Selected Industries

In 2013, Washington State exports increased by an inflation-adjusted \$2.71 billion over 2012, a 10.6% increase. As Figure 1 shows, this large increase in total exports follows the large increase in exports in 2011 and 2012, thus continuing an upward trend in exports beginning in 2010. This upward trend is a turnaround since state exports had been flat from 2008 to 2010, but exports in 2013 are at their highest level to date.

Figure 1 also illustrates that the aerospace products and parts industry has increased exports in 2013 to its highest level to date, with exports increasing by \$2.32 billion in inflation-adjusted value from a year earlier; a 15% increase. The aerospace industry is essentially the sole driver of the statewide increase in exports since aerospace exports account for 85% of the state’s increase in exports.

In fact, exports from most of Washington’s other leading exports industries decreased in 2013, as they did in 2012. Figure 2 shows the total Washington State export data are repeated from Figure 1 (scale is shown on the right axis of Figure 2), so that the trend in exports for the five industries under discussion can be compared to the state’s overall export trend. The scale differs by a factor of 20, revealing that the other large export industries were dwarfed by aerospace.

In 2013 exports decreased for the navigational, measuring, electromedical and control instruments sector by 5%; pulp, paper, and paperboard mill products decreased by 3%; basic chemicals by 28%; and nonferrous metal (except aluminum) and processing sector by almost 7%. The only sector besides aerospace that had an increase in exports among Washington’s leading export industries was the “other machinery” sector (including goods such as pumps, compressors, and material-handling equipment), which increased exports by 16%.

The export data on processed agricultural products fall into the food manufacturing (NAICS 311) subcategory under manufacturing (NAICS 31–33). An agricultural product must be considered processed if it is to count as a manufactured good. Processing methods include freezing, cutting, and packaging. Thus, the Census Bureau counts many products informally considered agricultural goods as manufactured products. The export data for unprocessed agricultural products (crop and animal production, NAICS 111 and 112) are not considered, because the data collection method used attributes goods to the port state, regardless of what state actually produced the good. Consequently, the export data for unprocessed agricultural goods for port states such as Washington do not accurately reflect the state’s economic activity. See [The Collection and Description of Washington State Export Data](#) (Cassey 2010) for details on Washington’s export data and related consolidation issues in port states.

Washington’s leading manufactured food products export industries include fruit and vegetable preserves and specialty foods, dairy products, meat and meat-packaging products, seafood products, foods not elsewhere specified, and grain and oilseed-milling products.

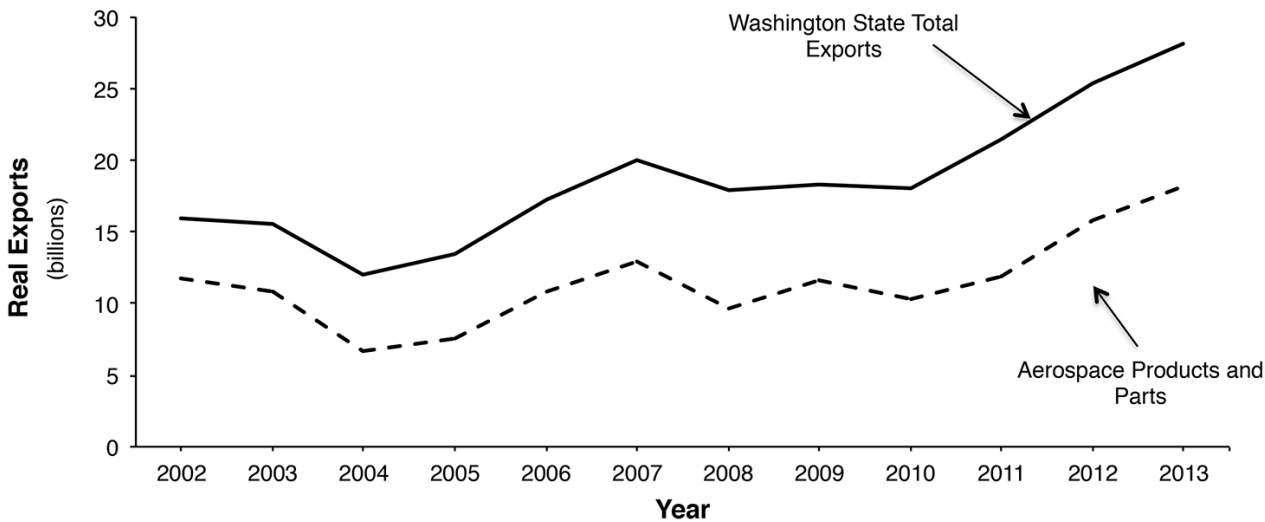


Figure 1. Inflation-adjusted exports for Washington State aerospace products and parts and total exports to the world, by year.

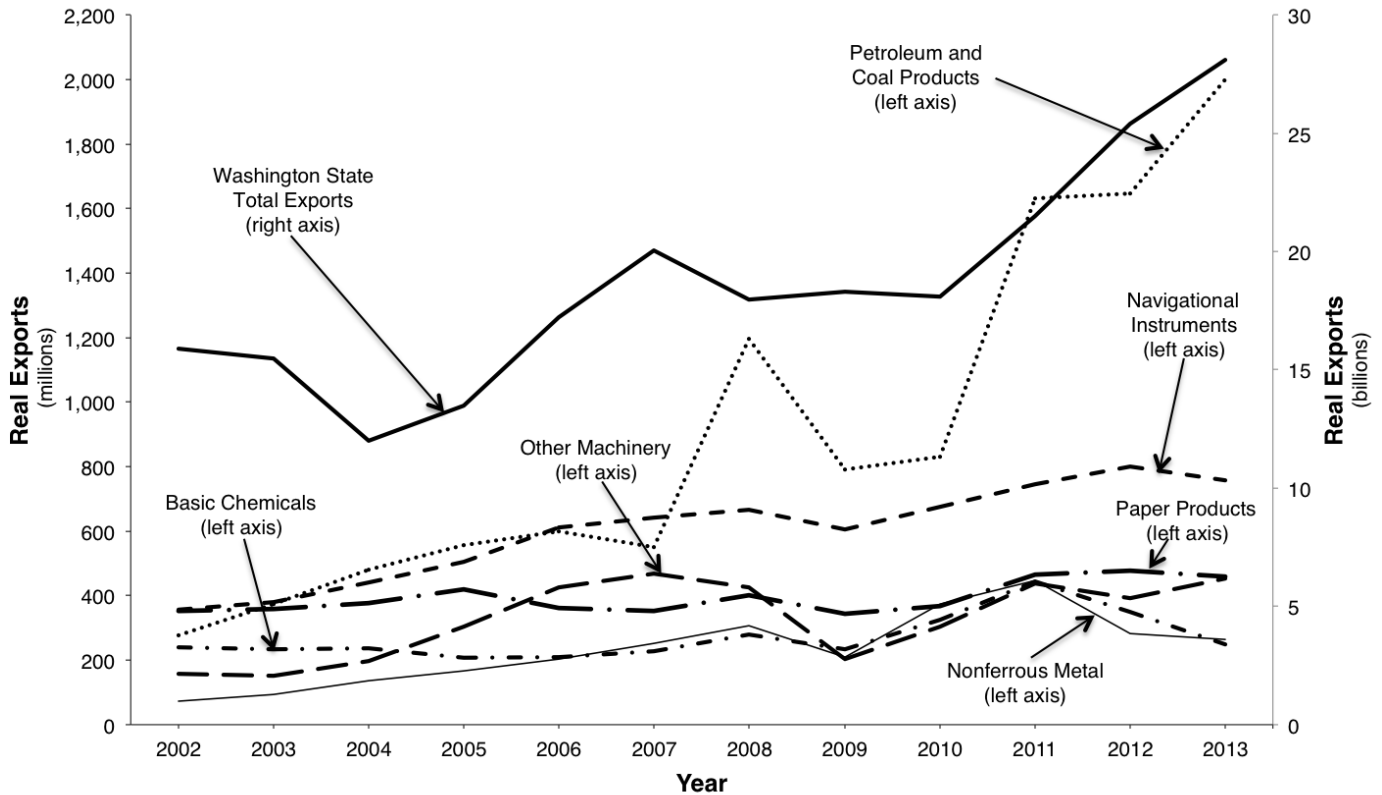


Figure 2. Inflation-adjusted exports for five Washington State industries and total exports to the world, by year.

Producers in the fruit and vegetable preserves industry group are primarily engaged in freezing fruits and vegetables as well as pickling, canning, and dehydrating them, regardless of the type of fruit or vegetable ([www.naics.com](http://www.naics.com)).

Figure 3 shows the inflation-adjusted export value for Washington’s processed agricultural products. The fruit and vegetable preserves industry leveled off in 2013, with exports only increasing by 0.6% to \$485 million in inflation-adjusted value. Exports were also flat for dairy products, meat products, seafood products, and other foods. Grain and oilseed-milling product exports increased substantially, from \$272 million to \$325 million, a 20% increase over 2012. Other than 2011, grain and oilseed milling products have been one of Washington’s export growth industries. However, Washington does not produce much in this industry. Thus, the exports reflect shipments produced in other states that are exported from ports located in Washington.

## Washington Inflation-Adjusted Import Patterns in Total and by Selected Industries

Data for state imports included in this fact sheet date from 2008 through 2013. Washington’s imports increased in 2013 from \$14.1 billion to \$14.9 billion. As with exports, the aerospace products and parts industry was the largest import sector, accounting for 22% of all Washington imports.

Aerospace products and parts imports increased from \$6.6 billion to \$7.8 billion. Continuing a long-term trend, imports of miscellaneous products fell nearly 20% (the miscellaneous products category includes items such as burial caskets, musical instruments, silverware, athletic goods, and signs). These trends are shown in Figure 4, as well as the trends for Washington’s other leading import industries: motor vehicles, communication equipment, and cut-and-sew apparel.

The most obvious import trend is the large increase in aerospace products and parts imported since 2008. The increase in aerospace *imports* is being driven by the increase in *exports* of aerospace products and parts because the imported goods are intermediates used for the final production of aerospace products, which are then exported. Imports of motor vehicles were flat in 2013, and the imports of miscellaneous products continues to decrease. In fact, imports in this industry have declined by more than half since 2008.

The import trends of processed agricultural products are shown in Figure 5. Washington’s leading import industry among processed agriculture is grain and oilseed-milling products. Inflation-adjusted imports for these industries have increased each year from 2009 to 2011, and again in 2013; the exception being 2012. Washington’s second leading import industry is food not elsewhere specified, followed by fruit and vegetable preserves, and meat products. Imports of meat products have been relatively stable since 2008.

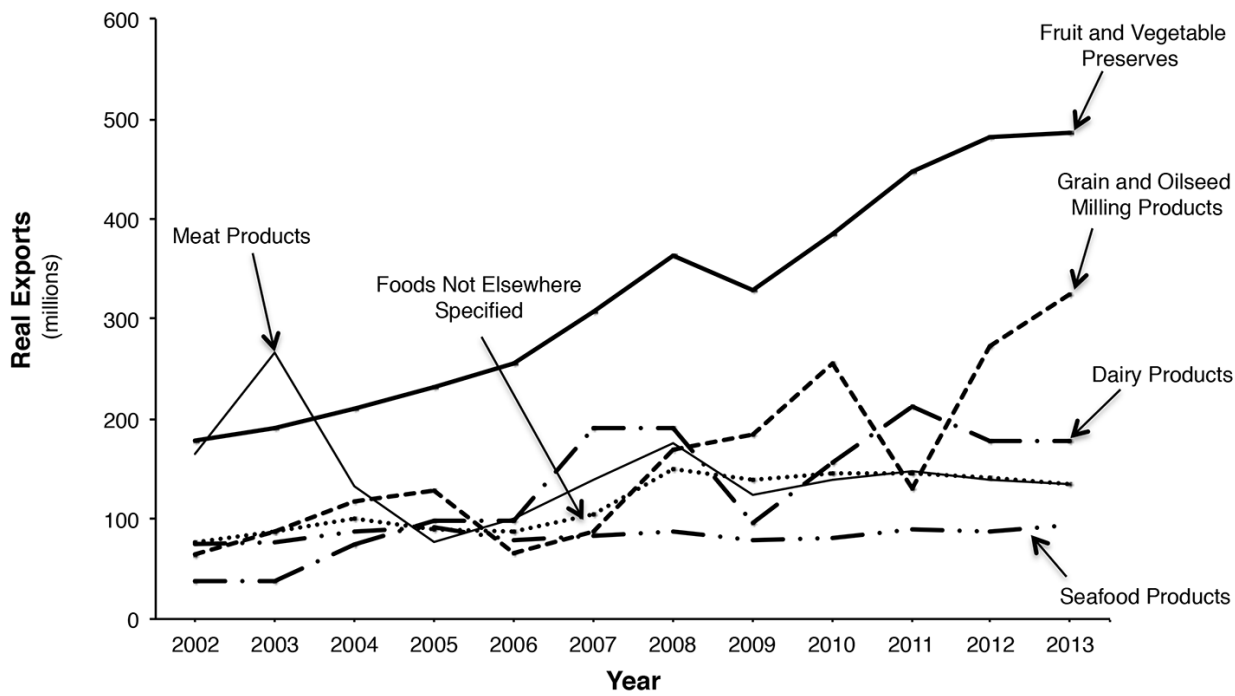


Figure 3. Inflation-adjusted exports of processed agricultural products for Washington State, by year.

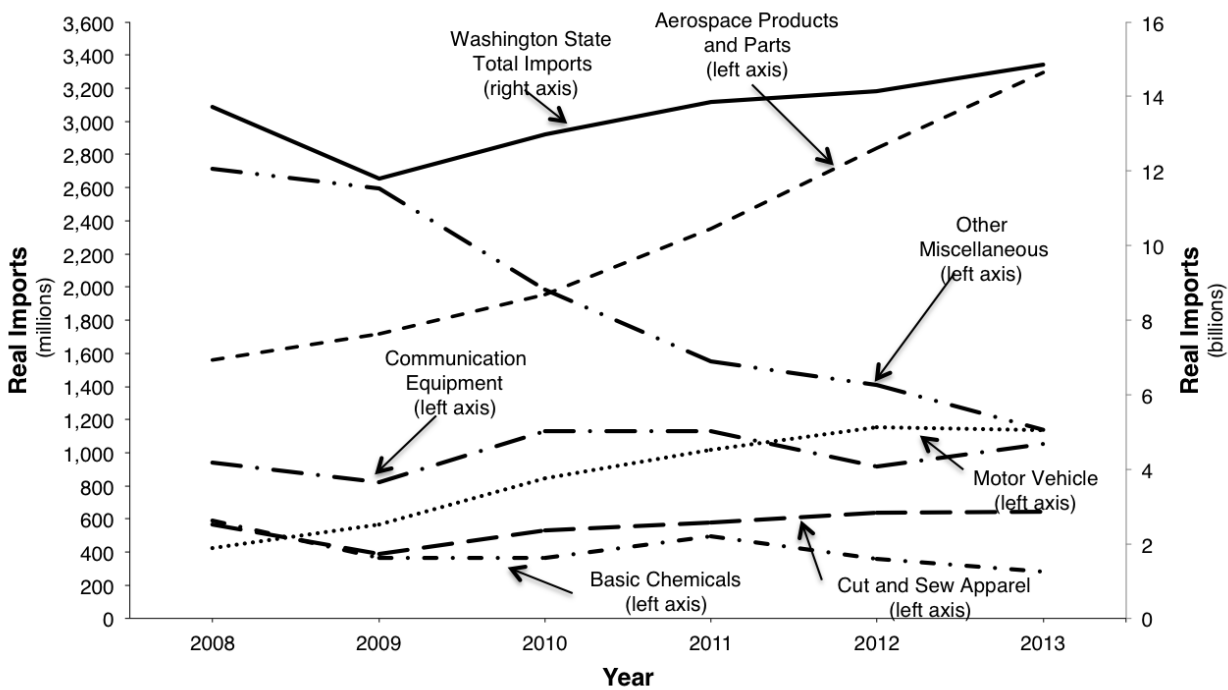


Figure 4. Inflation-adjusted imports for five Washington State industries and total imports from the world, by year.

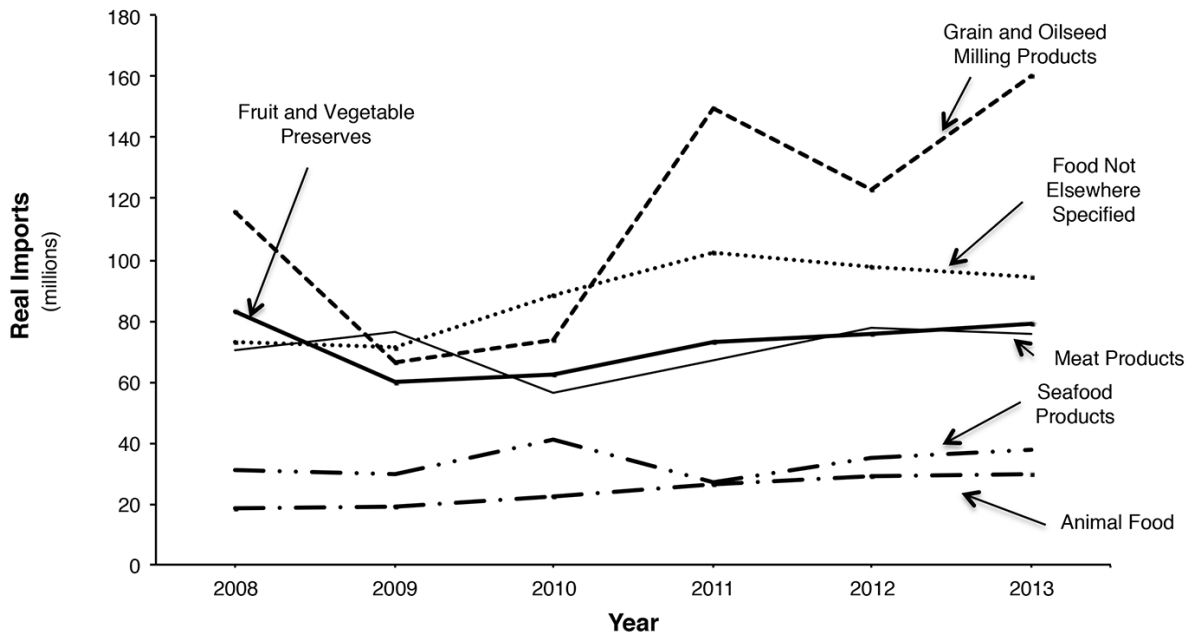


Figure 5. Inflation-adjusted imports of processed agricultural products for Washington State, by year.

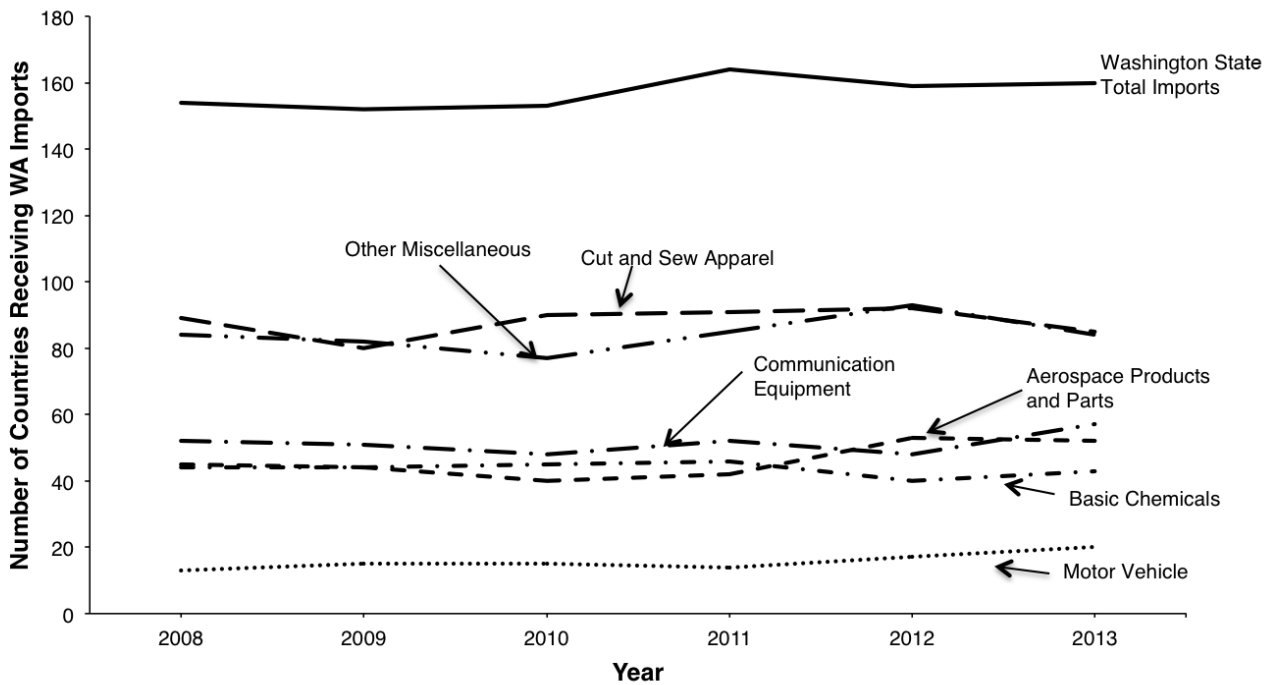


Figure 6. The number of countries that receive Washington State imports by industry and year.

It is interesting to note that Washington’s largest processed agricultural export industries are also the largest processed agricultural import industries. This is due to the differences in the imported and exported products that are classified together. For example, Washington imports and exports different fruit and vegetable preserves at different times of the year, but both are classified in the same category. Another example is seafood products, where Washington exports frozen salmon, but imports canned tuna, which are both classified as processed seafood products.

For the first time, this report includes the number of countries from which Washington imports goods. The total number of countries which Washington receives imports has been steady. These trends are shown in Figure 6. Washington received imports from 154 countries in 2008 and 160 countries in 2013. The stability in the number of countries in which Washington imports goods from holds for exports as well. Thus, the increase in exports and imports that have occurred since 2010 are due to more sales to each market, and not due to changes in sales to and from different markets.

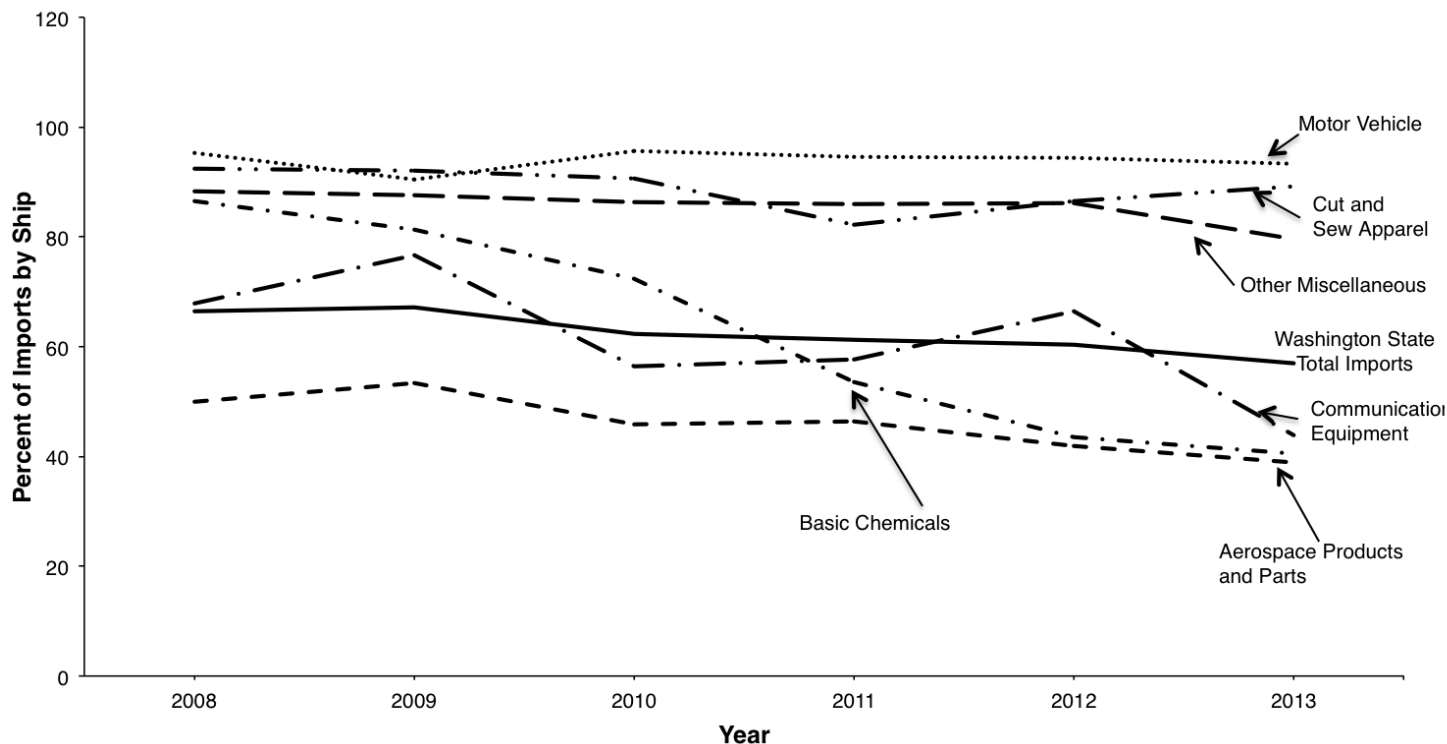


Figure 7. The share of six leading Washington industry imports transported by water.

The number of countries from where Washington State imports particular goods, such as aerospace products, has also remained stable. For example, Washington imported aerospace products and parts from 45 countries in 2008 and 52 countries in 2013.

## Mode of Transportation for Washington Imports

Figure 7 shows the fraction of imports that arrive in Washington by ship. The number of imports arriving by sea, like the number of markets, has been stable since 2008. Imports that do not arrive by ship may arrive by air, truck, rail, or pipeline, though in practice, imports by truck, rail, and pipeline are negligible.

Only the basic chemicals industry has changed the fraction of its imports arriving by water, going from 85% in 2008 to 46% in 2013. Communication equipment is also trending down, though that industry has had up and down cycles. Nearly all motor vehicle imports arrive by ship.

## Summary

Statewide exports increased again in 2013, achieving the highest inflation-adjusted total on record. But similar to 2012, nearly all of the increase in total exports was due to a large increase in aerospace products and parts exports.

Likewise, exports from Washington's other leading export industries decreased again in 2013. The fruit and vegetable preserves industry increased exports as well, but the increase in 2013 was much smaller than in previous years.

Imports into Washington State increased in 2013, and like exports, aerospace products and parts were the main component. New data on the number of countries from where Washington State imports goods shows that changes in total imports are due to changes in sales to the same markets rather than changes to the number of markets. Most imports into Washington continue to arrive by ship, suggesting the importance of the Ports of Seattle and Tacoma.

## References

Cassey, A.J. 2010. [The Collection and Description of Washington State Export Data](#). *Washington State University Extension* Publication FS006E.

U.S. Bureau of Labor Statistics. Various years. [Consumer Price Index](#). Washington, DC.

U.S. Department of Commerce. Various years. [TradeStats Express](#). Presented by the Office of Trade and Industry Information, International Trade Administration, using data from the Foreign Trade Division of the U.S. Census Bureau.

World Institute for Strategic Economic Research. Various years. [Origin of Movement State Export Data](#).



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