

2019 District Export Report

Goods and Services Exports by US Congressional Districts to China Over the Past Decade | 2019



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September 2019



Executive Summary

Every year, the US-China Business Council undertakes a comprehensive, econometric analysis of US goods and export data to China, broken down by states and voting districts. As in previous years, our data finds that China continues to be a critical export market for American manufacturers and service providers. However, rising uncertainty and bilateral tensions are negatively impacting the commercial opportunities China presents for American companies.

Trade tensions with China hit US goods exports in 2018, down 7 percent from the previous year. Services exports increased, but at a slower pace than in previous years. Despite these challenges, trade with China continued to contribute to US economic growth, with US exports to China supporting more than 1.1 million American jobs.

- China is the third-largest market for US goods and services exports. Despite trade friction and punitive tariffs, China remained a top market for US goods exports in 2018, with only NAFTA partners Canada and Mexico buying more goods. It was also the third-largest market for US services exports, after the United Kingdom and Canada.
- Trade tensions continue to weigh on the economy. Punitive tariffs contribute to an unpredictable business environment and are measurably harming US exporters and exacerbating the trade deficit with China.
- Most congressional districts have seen significant increases in exports of goods and services to
 China in the past decade, though exports in the last year were down—in some cases,
 significantly. All but eight congressional districts saw triple-digit growth in service exports to
 China over the last decade of available data, but the picture is not so rosy for goods exports.
 Only 104 districts saw triple-digit growth in goods exports from 2009 to 2018.

US Exports and US Jobs

• Exports to China support over 1.1 million American jobs. Districts across the country have jobs that are supported thanks to US exports to China, making trade important to not only US companies and consumers, but also US workers. US goods exports to China come from a wide range of industries including transportation equipment, semiconductors, and oil and gas, sustaining logistics jobs in America's ports and throughout the country. US services exports to China included travel and education, industrial processes, and management services, among other industries.



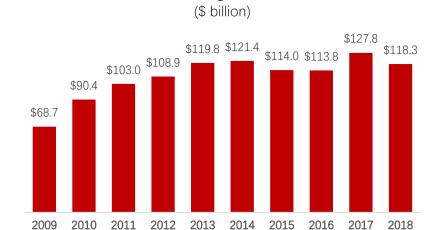
Goods Exports

US goods exports to China declined in 2018, after posting a record high the previous year.
 The United States exported \$118.3 billion in goods to China in 2018, compared with an all-time high of \$127.8 billion in 2017. The 7 percent, or \$9 billion, decline is likely due to the trade conflict between the United States and China which resulted in retaliatory tariffs on an estimated 85 percent of US goods, including most

 US Goods Exports to China

goods, including most agricultural products.

Despite the decline, goods
 exports to China still outpaced
 export growth to the rest of the
 world over the last decade. US
 exports of goods to China
 increased 72 percent over the
 last decade, while exports to
 the rest of the world grew only
 57 percent.



Services Exports

• Compared with previous years, US services exports to China grew more slowly in 2017, the latest year of full data, though they still outpaced services exports to other major markets. Services export growth to the rest of the world grew 2.7 percent faster than China that year. Over the last decade, however, US services exports to China grew significantly faster than those to the rest of the world–258 percent versus 49 percent.

\$53.7 \$56.1 \$53.7 \$37.0 \$332.5 \$32.5 \$15.7 \$16.8

2011 2012 2013 2014

US Services Exports to China

(\$ billion)

2009

2010

2008

2016

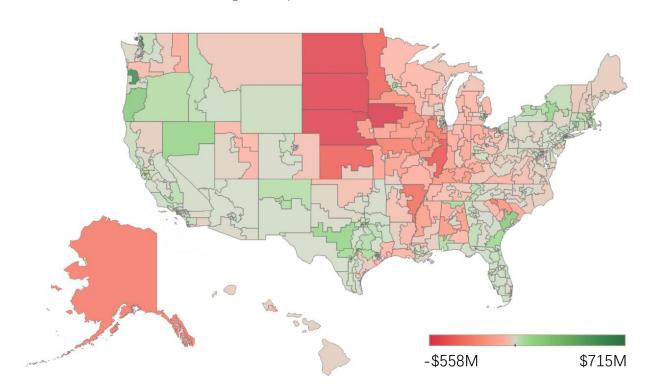
2015

Districts across the country feel the effects of the trade dispute

- Growth in exports to China slowed due to trade disputes between the United States and China. Two hundred and sixty-five congressional districts saw lower goods export volumes in 2018 than in 2017, and another 61 districts saw less than \$10 million dollars in export growth in the same period. Midwestern and Plains districts that export significant quantities of soybeans and other agricultural products were hit particularly hard. In services, 100 districts exported less to China in 2017 than they did in 2016, and only 23 districts had double-digit growth in services exports. Compare that to 2015 to 2016, when only eight districts saw a decline in services exports and 380 saw double-digit or higher growth.
- Trade disputes also affected the overall value of exports to China. In 2017, 12 districts exported more than \$1 billion in goods to China and 34 more exported over \$500 million; in 2018, those numbers fell to 10 and 25, respectively. The export of services remained relatively stable from 2016 to 2017, with 192 districts exporting more than \$100 million in both years. Continued growth in services may be the result of services exports not being subject to tariffs.
- China is a top goods and services export market for most districts. China was a top three goods export market for 240 districts in 2018, and among the top five for 357 districts. China was a top three services export market in 2015 for 305 congressional districts and a top five market for 396 districts.

Change in goods exports

Annual goods exports to China, 2017-2018





Methodology

This year's edition of the US-China Business Council (USCBC) District Exports Report uses data provided by The Trade Partnership, an economic research firm. The report provides a separate breakdown of each district's goods and services exports to China. The national export totals include the export data for each district. Goods export figures are based primarily on data from the US Census Bureau, the US Department of Agriculture (USDA), and Moody's Analytics. Goods export figures are classified according to the US government's North American Industry Classification (NAICS) system. Services export figures are based primarily on data from the US Bureau of Economic Analysis (BEA) and Moody's Analytics. Services export figures are classified according to the BEA categories. This year's edition of the District Exports Report uses the same sector categories for both goods and services as last year's edition. Goods exports cover 2009-2018; services exports cover 2008-2017, the most recent year detailed services export data are available from BEA. As historical data from each of these sources is revised annually, this issue of the District Exports Report replaces all prior editions. Similar to previous editions of the District Exports Report, this report uses a methodology that credits agricultural exports to districts where crops are grown as opposed to ones with large ports where bulk commodities are aggregated prior to export. A detailed explanation of the methodology for jobs, goods, and services export estimates is available on The Trade Partnership's website.

Sponsors



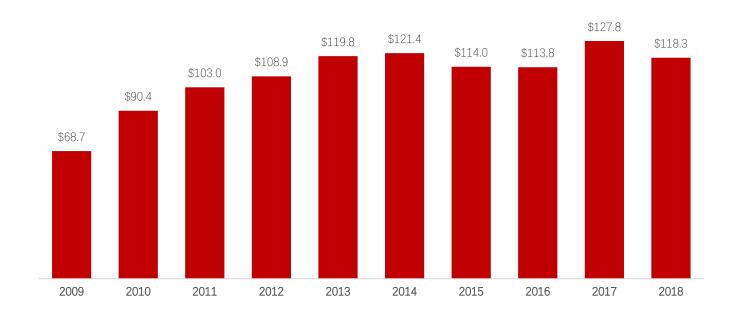






US Goods Exports to China

(\$ billion)



Growth in Total US Goods Exports, 2009 - 2018

Exports to China: 72.2% Exports to Rest of World 57.2%

Top Goods Export Markets, 2018

1. Canada	\$290.7 billion
2. Mexico	\$257.0 billion
3. China	\$118.3 billion
4. Japan	\$73.4 billion
5. United Kinadom	\$59.4 billion

Top US Goods Exports to China, 2018

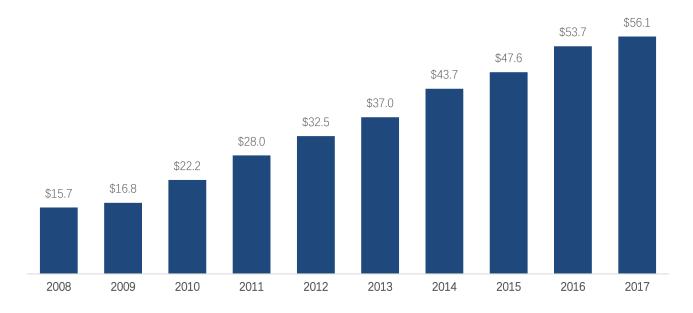
Aerospace Products & Parts	\$16.1 billion
Semiconductors & Components	\$8.0 billion
Oil & Gas	\$7.2 billion
Motor Vehicles	\$6.3 billion
Nav. & Meas. Instruments	\$6.1 billion

China is the United States' third-largest goods export market



US Services Exports to China

(\$ billion)



Growth in Total US Services Exports, 2008 - 2017

Exports to China: 257.5% Exports to Rest of World 48.7%

Top Services Export Markets, 2017		Top US Services Exports to China, 2017		
1. United Kingdom	\$69.4 billion	1. Travel	\$18.9 billion	
2. Canada	\$57.9 billion	2. Travel (Education)	\$12.8 billion	
3. China	\$56.1 billion	3. Industrial Processes	\$4.6 billion	
4. Ireland	\$49.8 billion	4. Passenger Fares	\$2.5 billion	
5 Japan	\$45.6 billion	5 Mamt and advisory ser	vices \$1.9 billion	

China is the United States' third-largest services export market

Note: Full-year services export data are available only through year-end 2017.



Top US Goods Export Markets in 2018

Country	Total (\$ billion)	Growth (2017-2018)	Avg. Annual Growth (2009-2018)
1. Canada	\$290.7	6.1%	4.3%
2. Mexico	\$257.0	9.0%	8.4%
3. China	\$118.3	-7.4%	6.2%
4. Japan	\$73.4	11.6%	4.4%
5. United Kingdom	\$59.4	18.7%	3.9%
6. Korea, South	\$55.4	16.7%	7.9%
7. Germany	\$54.5	6.5%	3.1%
8. Netherlands	\$47.3	17.7%	4.7%
9. Brazil	\$38.5	5.8%	4.7%
10. Hong Kong	\$34.4	-8.2%	6.0%

- Despite trade disagreements with the United States, China continues to be an important market for US goods exports. China is currently the United States' third-largest export market. In 2018, US goods exports to China totaled over \$118 billion, down from \$127 billion in 2017.
- US goods exports to China declined in 2018, down seven percent from 2017. US exports to China have grown faster over the last decade than exports to any other top US trade partner.
- Hong Kong is often a through point for US exports ultimately destined for China. This was
 reflected in the equal decline in exports to Hong Kong in 2018. In 2018, combined US exports
 to Hong Kong and China totaled \$152.7 billion, down from a combined \$165.3 in 2017.

Top US Services Export Markets in 2017

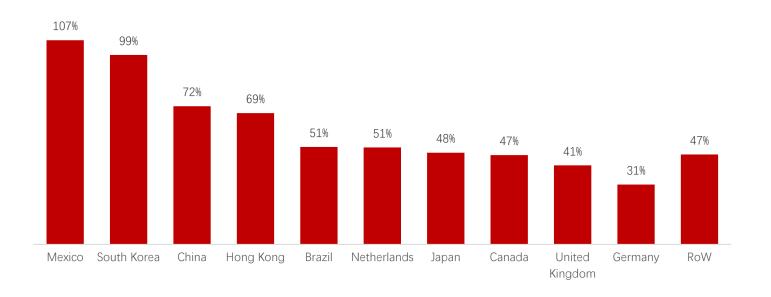
Co	untry	Total (\$ billion)	Growth (2016-2017)	Avg. Annual Growth (2008-2017)
1.	United Kingdom	\$69.4	3.9%	1.7%
2.	Canada	\$57.9	7.0%	2.9%
3.	China	\$56.1	4.1%	15.2%
4.	Ireland	\$49.8	2.5%	7.7%
5.	Japan	\$45.6	2.7%	1.7%
6.	Switzerland	\$37.2	12.2%	7.1%
7.	UK Islands, Caribbean	\$34.5	6.8%	11.0%
8.	Germany	\$32.5	2.5%	1.9%
9.	Mexico	\$32.4	3.8%	2.5%
10.	Brazil	\$26.2	9.6%	8.4%

- China is an important market for US services exports, though exports grew at a slower rate in 2017 than in previous years. China is currently the United States' third-largest export market. In 2017, US services exports to China reached about \$56 billion, up from \$53 billion in 2016.
- Despite slowing growth in 2017, US services exports to China have grown faster over the last decade than exports to any other top US trade partner. US services exports include travel and education, transportation, business and professional services, and financial services, among other industries.

Note: Full-year services export data are available only through year-end 2017. Data for UK Caribbean began to be reported in 2013.



Growth in US Goods Exports to Top 10 Markets, 2009-2018



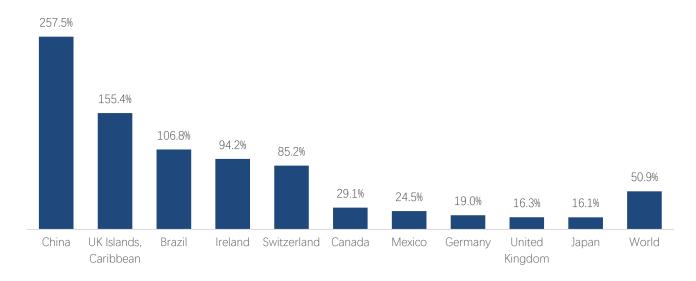
Double-digit growth for US goods exports to China

- Over the past decade, US exports to China have risen by 73 percent, making China a top purchaser of US goods. Goods exports to Hong Kong grew at about the same rate—an indication that many exports ultimately destined for China first pass through Hong Kong.
- China remains the third-largest market for US goods exports behind Canada and Mexico, two countries with which the United States has a regional trade agreement. Of the top 10 US goods export markets, Mexico and South Korea experienced greater growth rates over the ten years between 2009 and 2018 than China did.
- In 2018, the top US goods exports to China included aerospace products and parts, semiconductors and components, and oil and gas.

Note: Rankings are based on export data for 2009 and 2018, comparing the top 10 markets for US exports. "Rest of World" export growth for this page is calculated using the cumulative sums for US exports to all remaining markets (non-top-10) for those years.



Growth in US Services Exports to Top 10 Markets, 2008-2017



US services exports to China are strong, but not immune to trade tension

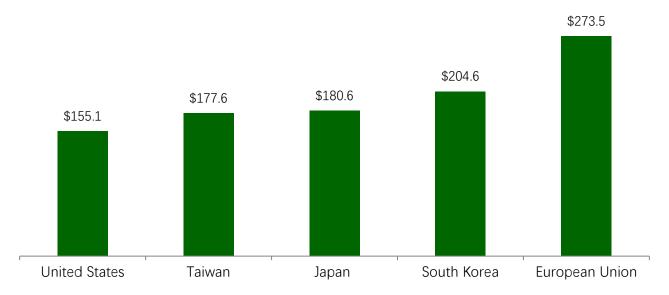
- Over the past decade, US exports to China have risen by nearly 258 percent, making China a
 top purchaser of US services, though trade conflicts between the two nations have slowed
 the rate of growth. Over the ten-year period ending in 2016, US services exports to the rest
 of the world grew by 49 percent.
- Despite trade disagreements, US services exports to China grew at a higher annual rate than to any other market, growing almost 14 percent annually for the past decade.
- China is the third-largest services market for US exports behind the United Kingdom and Canada.
- In 2017, the top US services exports to China included travel and education-related travel, industrial processes, passenger fares, and management and advisory services.

Note: Rankings are based on export data for 2008 and 2017, comparing the top 10 markets for US exports. "Rest of World" export growth for this page is calculated using the cumulative sums for US exports to all remaining markets (non-top 10) for those years. Full-year services export data are available only through year-end 2017.



China's Top 5 Import Sources, 2018

(\$ billion)



US foreign competitors benefitted from US-China trade tensions in 2018

- The European Union, South Korea, Japan, and Taiwan all continue to export more goods to China than the United States, and those economies have benefitted from the trade tensions between the United States and China.
- Though US exports to China have grown significantly over the last decade, US imports to China in 2017 accounted for around 7.3 percent of China's total imports, compared to 13 percent from the European Union and 9.6 percent from South Korea.
- Trade disputes between the United States and China had an effect on US goods exports to China. Imports from the United States grew by only 0.75 percent between 2017 and 2018. By contrast, imports from South Korea increased by 15.3 percent, from Japan by 14.3 percent, and from the European Union by 11.7 percent.

Note: Data for this chart are based on PRC government statistics. The value of PRC imports from the United States is higher than US exports to China because of several data discrepancies between US and PRC trade statistics, reflecting methodological differences regarding shipping costs, as well as tariffs that are applied as goods pass through other customs territories on their way to China.



Top US District Goods Exporters to China, 2018

		Growth	Growth
District	Exports	(2017-2018)	(2009-2018)
1. Washington 2 nd	\$7.1 billion	11.2%	259.1%
2. Washington 9 th	\$3.5 billion	-4.4%	95.9%
3. California 17 th	\$3.1 billion	-11.5%	93.8%
4. Oregon 1 st	\$2.9 billion	24.2%	45.8%
5. South Carolina 6 th	\$2.1 billion	9.1%	1220.0%
6. Texas 7 th	\$1.9 billion	-1.5%	344.7%
7. South Carolina 4 th	\$1.6 billion	-16.9%	680.0%
8. Texas 11 th	\$1.4 billion	9.2%	884.9%
9. Texas 18 th	\$1.1 billion	-2.3%	74.0%
10. Alaska	\$1.0 billion	-23.0%	73.6%
11. Texas 36 th	\$931 million	-7.4%	6.5%
12. Kentucky 6 th	\$913 million	-12.4%	405.3%
13. Washington 7 th	\$885 million	5.7%	81.4%
14. Texas 14 th	\$866 million	-9.6%	26.4%
15. Nevada 2 nd	\$767 million	17.7%	330.6%

Districts across the country experienced declines in goods exports in 2018

- While many US districts continue to sell a variety of exports to China, growth—or lack thereof—in goods exports between 2017 and 2018 reflected ongoing trade disputes between the United States and China.
- Only 171 districts increased their goods exports to China in 2018 over the previous year. Of
 the rest of the districts that faced contraction in goods exports, 157 had double-digit declines
 in exports during that same period, with 15 districts losing half of their export totals.
- Of the 15 districts that exported the most to China in 2018, nine saw a year-over-year decline. Only 65 districts exported less to China in 2018 than they did in 2009, and 349 had at least double-digit growth over that period.



Top US District Services Exporters to China, 2017

		Growth	Growth
District	Exports	(2016-2017)	(2008-2017)
1. New York 12 th	\$1.6 billion	12.6%	354.1%
2. New York 10 th	\$1.3 billion	12.7%	493.0%
3. Massachusetts 7 th	\$848 million	13.9%	461.9%
4. California 33 rd	\$717 million	7.0%	354.3%
5. California 12 th	\$538 million	1.6%	323.5%
6. Washington 7 th	\$509 million	6.4%	170.4%
7. Nevada 1 st	\$500 million	-1.4%	325.2%
8. California 28 th	\$438 million	11.3%	522.3%
9. District of Columbia	\$432 million	2.3%	254.2%
10. California 14 th	\$428 million	7.7%	233.9%
11. Massachusetts 8 th	\$421 million	6.7%	340.7%
12. California 37 th	\$418 million	11.9%	511.1%
13. Georgia 5 th	\$418 million	4.5%	208.5%
14. California 18 th	\$414 million	9.9%	326.2%
15. California 17 th	\$394 million	12.6%	354.1%

Services export growth to China slowed in 2017 compared with previous years

- All but eight districts have experienced triple-digit services export growth to China since 2008, but slower increases in 2017 affected long-term returns for many.
- In 2017, China was the top market for services exports for 142 districts and a top five market for 396 districts.
- Services exports have remained relatively robust in the last year of data, with seven districts exporting more than \$500 million in services to China in 2017, compared with six in 2016. In 2008, not a single district exported more than \$500 million in services to China.

Note: Full-year services export data are available only through year-end 2017.



Top 5 Goods Exporters to China in 2018

The exports of the top five congressional districts show high-tech goods like aircraft parts, instruments, and semiconductors dominating the top slots. Districts that export significant quantities of these high-end goods have managed to weather the worst of US-China trade tensions, compared with states that export more agricultural goods, for example.



Washington's 2nd District (\$7.1 billion)

Top exports:

- 1. Aerospace products and parts (\$6.7 billion)
- 2. Navigational and measurement instruments (\$185 million)
- 3. Semiconductors & components (\$29 million)



Washington's 9th District (\$3.5 billion)

Top exports:

- 1. Aerospace products and parts (\$3.1 billion)
- 2. Motor vehicles (\$101 million)
- 3. Navigational and measurement instruments (\$74 million)



California's 17th District (\$3.1 billion)

Top exports:

- 1. Motor vehicles (\$1.2 billion)
 - 2. Computer equipment (\$524 million)
 - 3. Industrial machinery (\$505 million)



Oregon's 1st District (\$2.9 billion)

Top exports:

- 1. Semiconductors & components (\$2.3 billion)
- 2. Industrial machinery (\$381 million)
- 3. Navigational and measurement instruments (\$85 million)



South Carolina's 6th District (\$2.1 billion)

Top exports:

- 1. Aerospace products and parts (\$1.8 billion)
- 2. Motor vehicles (\$76 million)
- 3. Pulp & paperboard mill products (\$32 million)



Top 5 Services Exporters to China in 2017

Major services exports from the five top congressional districts also show a concentration in a few key industries, namely education, management services, and travel. US-China tensions may have a more significant impact in next year's dataset. Some anecdotal evidence suggests that fewer Chinese students may enroll in American universities and fewer Chinese tourists may choose to visit the United States in the coming years as a result of US-China tensions and broader international trends.



New York's 12th District (\$1.6 billion)

Top exports:

- 1. Management & advisory services (\$453 million)
- 2. Travel (\$387 million)
- 3. Film & television distribution (\$152 million)



New York's 10th District (\$1.3 billion)

Top exports:

- 1. Education (\$648 million)
- 2. Travel (\$216 million)
- 3. Management & advisory services (\$160 million)



Massachusetts' 7th District (\$848 million)

Top exports:

- 1. Education (\$535 million)
- 2. Travel (\$147 million)
- 3. Management & advisory services (\$63 million)



California's 33rd District (\$718 million)

Top exports:

- 1. Education (\$229 million)
- 2. Film & television distribution (\$180 million)
- 3. Travel (\$141 million)



California's 12th District (\$718 million)

Top exports:

- 1. Travel (\$214 million)
- 2. Education (\$107 million)
- 3. Management & advisory services (\$47 million)



Biggest Decreases in Goods Exports 2017 to 2018

While it was clear that many districts saw significant decreases in goods exports, several districts are worth a closer look. Iowa's 4th District, Nebraska's 3rd District, and the at-large districts of South and North Dakota all saw massive collapses in goods exports from 2017 to 2018, in some cases erasing gains made over the past decade. Retaliatory Chinese tariffs on US agricultural goods have caused significant damage in states exporting agricultural goods and have caused potentially long-lasting damage to US competitiveness in the Chinese market.



Iowa's 4th District (-\$558 million)

lowa's 4th District saw goods exports contract by 62 percent year over year. Similar to other districts hit hard by trade tensions, the district exports oilseeds and grains, agricultural and construction machinery, and meat products.

Nebraska's 3rd District (-\$527 million)

The 3rd District of Nebraska encompasses most of the state's land mass and is a significant agricultural exporter. Major products in 2018 were oilseeds and grains, meat products, and animal foods.





South Dakota (-\$526 million)

South Dakota, an at-large congressional district, has seen a 69 percent collapse in goods exports to China since 2017 and a 75 percent decline since 2016. Like the other districts here, it is an exporter of oilseeds and grains, agricultural and construction machinery, and meat.

North Dakota (-\$522 million)

North Dakota, an at-large congressional district like its southern neighbor, has seen a 72 percent collapse in goods exports to China since 2017 and a 76 percent decline since 2016. Like the other districts here, it is an exporter of a variety of agriculture products, but also produces a small amount of semiconductors and components.



Biggest Increases in Goods Exports 2017 to 2018

Unlike the heavily agriculture-dominated districts that saw the biggest collapses in goods exports, those that saw significant growth came from a range of industries.



Washington's 2nd District (+\$714 million)

Home to an array of aerospace suppliers for Boeing, Washington's 2nd District saw an 11% increase to a total of \$7.1 billion in exports to China, \$6.7 billion of which is comprised of aerospace products and parts. The district is also a major exporter of navigational and measuring instruments.

Oregon's 1st District (+\$575 million)

Although Oregon's 1st District saw a high point in exports to China of \$4.1 billion in 2016, the district's exports grew 17% to \$2.9 billion in 2018 from \$2.4 billion in 2017. Semiconductors and components make up the vast majority of the district's exports, though it also exports industrial machinery and navigational instruments.





Oregon's 4th District (+\$180 million)

Oregon's 4th saw a significant 33% spike in exports to China in 2018 after five years of relatively flat growth. The district exports a range of items, including chemical preparations, industrial machinery, pesticides, and semiconductors and componentry.

South Carolina's 6th District (+\$175 million)

Similar to Washington's 2nd, South Carolina's 6th is a major exporter of aerospace products and parts, which comprise around 90% of its exports to China. The district saw a 9% increase in exports to China in 2018.



