



# The New Free Trade Agreements and Washington State Exporters

WASHINGTON STATE UNIVERSITY EXTENSION FACT SHEET • FS114E

The new free trade agreements between the United States and South Korea, Panama, and Colombia have reduced tariffs and quotas for a large range of exported products. These new agreements may open new markets for Washington State's small- to medium-sized export businesses. This document describes the important details of each of the free trade agreements. It also describes current import and export trends, and the potential for additional export opportunities for Washington businesses.

## Introduction

In the latter part of 2011 and early 2012, the United States entered into bilateral free trade agreements with South Korea, Panama, and Colombia. These new agreements are now taking effect and will have implications for Washington State exporters. Washington businesses that take advantage of the reduced trade barriers as a result of the free trade agreements have a potential to increase their overseas transactions. This fact sheet documents the recent trade patterns between Washington State and South Korea, Panama, and Colombia, including the trade potential and the implications of reduced barriers to exports.

A free trade agreement (FTA) is a legal agreement between countries to reduce barriers to trade. These barriers are most frequently tariffs (a tax on importing a good or service) or import quotas. Other types of import barriers, such as inspections or sanitary certificate requirements, may also be included in a FTA. The FTA is meant to benefit each participating country by increasing exports and reducing prices paid by domestic consumers. Currently the United States has 20 free trade agreements. There is the well known North American Free Trade Agreement with Canada and Mexico, and lesser known agreements with Australia, Bahrain, Chile, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Morocco, Nicaragua, Oman, Peru, and Singapore (see [export.gov](http://export.gov) for details of these FTAs).

## Details of the Three Bilateral Free Trade Agreements

The FTA with South Korea was signed in 2007 and took effect in March 2012. In terms of economic potential, the FTA with South Korea is the second largest agreement after

NAFTA (Cooper et al. 2011). The agreement calls for the complete elimination of tariffs on more than 80 percent of U.S. products that are currently taxed by South Korea, and import duties are to be eliminated on more than 95 percent of industrial and consumer goods within five years (United States Trade Representative). The agreement is comprehensive and liberalizes trade in manufactured goods, and agricultural products and services. The agreement also includes resolutions on intellectual property rights, labor rights, and environmental issues. Details of the FTA with South Korea are listed in Table 1 on the following page.

The FTA with Panama was also signed in 2007 and took effect in October 2012. Panama's economy is largely service-based with essentially no manufacturing, making it a large importer of goods (Sullivan 2012). The free trade agreement calls for the elimination of tariffs on 88 percent of U.S. commercial and industrial exports that are currently taxed by Panama. The FTA also eliminates tariffs on more than 50 percent of U.S. farm exports (Hornbeck 2012). Like South Korea, the agreement with Panama is comprehensive, liberalizing trade in telecommunications, services, government procurement, and resolutions on foreign investment and intellectual property rights.

Features of the FTA with Panama include (Hornbeck 2012):

- **Agriculture:** U.S. agricultural exports to Panama face an average tariff of 15 percent. The trade agreement immediately eliminates tariffs on 56 percent of U.S. agricultural exports such as high-quality beef, poultry products, soybeans, most fresh fruits, distilled spirits, and wine. Most of the remaining tariffs will be phased out within 15 years. U.S. farm products affected by quotas include pork, chicken leg quarters, dairy products, corn, rice, refined corn oil, dried beans, frozen French fries, and tomato products.
- **Manufactured Goods:** Immediate duty-free access for U.S. exports include agricultural equipment, aerospace, automotive, construction equipment, electrical equipment, environmental goods, information and communications technologies, infrastructure and machinery, scientific equipment, and mineral fuels.

**Table 1. Features of the U.S.–South Korea Free Trade Agreement**

<b>Commodity</b>	<b>Pre-FTA Tariff (percent)</b>	<b>Tariff Elimination Schedule (from March 2012)</b>
Aerospace	3.5–8.0	Over 3 years
Textiles	13.0–35.0	77 percent (by value) immediately, 13 percent over 3 years, and 10 percent over 5 years
Aluminum plates, sheets, and strips	8.0	Over 3 years
Parts of electrical machines	8.0	Immediately
Electric equipment	7.4–13.0	96 percent of U.S. exports receive duty free immediately
Paper and paper products	0.0–7.0	Immediately
Automobiles	8.0	4 percent immediately and zero in 5 years
Plastics	6.5	Immediately
Computer and IT products	0.0	Duty free under the WTO Information Technology Agreement
Sweet cherries	24.0	Immediately
Wine	15.0	Immediately
Frozen potatoes	18.0	Immediately
Wheat	1.8	Immediately
Beef	40.0	Over 15 years
Fresh potatoes	30.0	Immediately
Fresh and chilled pork	22.5	Over 10 years
Sauces and condiments	8.0	5 to 10 years

Source: U.S. Trade Representative

**Table 2. Features of the U.S.–Colombia Free Trade Agreement**

<b>Commodity</b>	<b>Pre-FTA Tariff (percent)</b>	<b>Tariff Elimination Schedule (from May 2012)</b>
Metals and ores	9.2	Immediately
Infrastructure and machinery	11.1	Immediately
Transportation equipment	12.7	Immediately
Autos and auto parts	7.4	Immediately
Building products	13.2	Immediately
Paper and paper products	12.5	Immediately
Consumer goods	14.6	Immediately
Chemicals	7.8	82 percent of U.S. exports receive duty free immediately; remaining in 7 years
Computer and IT products	0.0	Duty free under the WTO Information Technology Agreement
Pork products	20.0–30.0	5 to 15 years
Cotton	10.0	Immediately
Corn	25.0	Immediately
Wheat	5.0–20.0	Immediately
Soybean	5.0–20.0	Immediately

Source: U.S. Trade Representative

- **Textiles and Apparel:** Apparel products made in Panama will have duty-free access under the agreement if they use U.S. or Panamanian fabric and yarn.
- **Services:** Panama will eliminate measures that restrict investment in retail trade.

The free trade agreement with Colombia was signed in 2006 and took effect in May 2012. This agreement eliminates tariffs on more than 80 percent of U.S. consumer and industrial products. All remaining tariffs will be phased out in 10 years. U.S. exports that are now duty free because of the FTA include agricultural and construction equipment, aircraft and parts, auto parts, fertilizers and agro-chemicals, information technology equipment, medical and scientific equipment, and wood (Table 2). Colombia also eliminated, or will eliminate, tariffs on more than 75 percent of agricultural products from the United States, including wheat,

barley, soybeans, soybean meal and flour, high quality beef, bacon, cotton, and a vast majority of processed products (United States Trade Representative).

## Recent Trade Patterns with South Korea

South Korea's major import partners are China, Japan, the United States, the European Union, and Saudi Arabia. Its main export partners are China, the United States, the European Union, Japan, and Hong Kong (IMF DOTS). South Korea had a total trade volume of \$1079.61 billion in 2011; of which \$524.40 billion was imports, and \$555.21 billion was exported. (Nominal export data have been adjusted for inflation using the annual values from the Consumer Price Index for all urban consumers, and are available from the [Bureau of Labor Statistics](#). The base year is 2011; dollar values of the data corresponds to the value of the dollar in 2011.) As Table 3A shows,

**Table 3A. Top 10 South Korea import industries from all countries in 2011**

INDUSTRY	HS Code	2011	
		Imports (millions\$)	Share (percent)
Petroleum oils, oils from bituminous minerals, crude	2709	100,805.57	19.22
Petroleum gases and other gaseous hydrocarbons	2711	30,182.72	5.76
Electronic integrated circuits and microassemblies	8542	25,435.62	4.85
Oils petroleum, bituminous, distillates, except crude	2710	22,029.89	4.20
Coal, briquettes, ovoids, etc., made from coal	2701	18,283.66	3.49
Machines having individual functions	8479	14,195.79	2.71
Iron ores and concentrates, roasted iron pyrites	2601	11,380.77	2.17
Flat-rolled products of iron or non-alloy steel	7208	7,775.17	1.48
Electric apparatus for line telephony, telegraphy	8517	6,096.74	1.16
Copper ores and concentrates	2603	5,634.03	1.07
Subtotal		241,819.96	46.11
TOTAL		524,405.22	100.00

**Table 3B. Top 10 South Korea export industries to all countries in 2011**

INDUSTRY	HS Code	2011	
		Exports (millions\$)	Share (percent)
Oils petroleum, bituminous, distillates, except crude	2710	50,371.14	9.07
Motor vehicles for transport of persons	8703	40,909.86	7.37
Electronic integrated circuits and microassemblies	8542	39,691.78	7.15
Passenger and goods transport ships, boats	8901	37,969.84	6.84
Liquid crystal devices, lasers, optical appliances	9013	27,656.22	4.98
Parts and accessories of the motor vehicles	8708	21,583.36	3.89
Special purpose ships, vessels	8905	16,043.65	2.89
Radio and TV transmitters, television cameras	8525	15,781.38	2.84
Electric apparatus for line telephony, telegraphy	8517	10,724.62	1.93
Parts for radio, TV transmission, receive equipment	8529	8,444.34	1.52
Subtotal		269,176.19	48.48
TOTAL		555,208.90	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) for all urban consumers with 2011 as a base year. Share is South Korea's industry relative to South Korea's total. Classifications of goods follow the Harmonized System (HS)—4 digit level code.

Source: UN Comtrade

South Korea's largest imports are crude petroleum oil, petroleum gases, electronic circuits, non-crude petroleum oil, and coal. The country's largest exports are non-crude petroleum oil, motor vehicles, electronic circuits, ships and boats, and optical appliances (Table 3B). South Korea is both a major importer and exporter of electronic circuits and petroleum oil, among other industries. This within-industry trade indicates that intermediate products are being traded, and then further processed in the domestic market.

South Korea is a major economic partner with the United States. The major U.S. imports from South Korea are motor vehicles, radio and TV transmitters, motor vehicle parts, electronic circuits and non-crude petroleum oil (Table 4A). In 2011, the United States exported \$43.51 billion in inflation-adjusted value to South Korea. The top goods exported from the U.S. to South Korea are electronic circuits, com-

modities not elsewhere specified, machines, maize, and ferrous waste (Table 4B).

Most of the major goods South Korea imports from other countries are similar to goods that it imports from the United States—with just a few differences. The United States is a large exporter of corn and bovine meat, and in 2011, meat and edible meat offal exports were worth \$1301 million in inflation-adjusted value. South Korea suspended beef imports from the United States in 2003 in response to an outbreak of mad cow disease, but resumed imports in 2008 (Jurenas and Manyin 2010).

Washington's top 10 manufacturing exports to South Korea in 2011 had a value of \$1400 million (inflation-adjusted dollars) (Table 5A). The top manufacturing exports were aerospace products, fabricated metal products, navigational and measuring instruments, petroleum and coal, and paper

**Table 4A. Top 10 U.S. import industries from South Korea in 2011**

INDUSTRY	2011		
	HS Code	Imports (millions\$)	Share (percent)
Motor vehicles for transport of persons	8703	8,880.92	15.160
Radio and TV transmitters, television cameras	8525	8,062.93	13.764
Parts and accessories of the motor vehicles	8708	3,240.73	5.532
Electronic integrated circuits and microassemblies	8542	3,025.01	5.164
Oils petroleum, bituminous, distillates, except crude	2710	2,323.35	3.966
Parts, accessories, except covers, for office machines	8473	1,589.24	2.713
New pneumatic tires of rubber	4011	1,569.74	2.680
Other tubes, pipes, and hollow profiles	7306	1,343.74	2.294
Automatic data processing machines (computers)	8471	1,135.26	1.938
Refrigerators, freezers, and heat pumps	8418	1,133.40	1.935
Subtotal		32,304.31	55.15
TOTAL		58,580.16	100.00

**Table 4B. Top 10 U.S. export industries to South Korea in 2011**

INDUSTRY	2011		
	HS Code	Exports (millions\$)	Share (percent)
Electronic integrated circuits and micro-assemblies	8542	2,922.60	6.72
Commodities not elsewhere specified	9999	2,587.84	5.95
Machines and mechanical appliances	8479	2,415.37	5.55
Maize (corn)	1005	1,846.54	4.24
Ferrous waste or scrap, ingots of iron or steel	7204	1,322.24	3.04
Coal, briquettes, ovoids, etc., made from coal	2701	1,163.06	2.67
Coal-tar distillation products including oils	2707	856.52	1.97
Diodes, transistors, semiconductors	8541	594.62	1.37
Meat of bovine animals, frozen	0202	581.09	1.34
Platinum, unwrought, semi-manufactured	7110	544.18	1.25
Subtotal		14,834.06	34.10
TOTAL		43,504.76	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) for all urban consumers with 2011 as a base year. Share is U.S. industry relative to U.S. total. Classifications of goods follow the Harmonized System (HS)—4 digit level code.

Source: UN Comtrade

**Table 5A. Top 10 Washington manufacturing export industries to South Korea**

INDUSTRY	2011			2005–2010		
	Rank	Exports (millions\$)	Share (percent)	Rank	Exports (millions\$)	Share (percent)
Aerospace products and parts	1	812.52	49.12	1	930.67	61.51
Other fabricated metal products	2	116.24	7.03	17	7.37	0.49
Nav, meas, electromed, and control instruments	3	85.37	5.16	6	41.83	2.76
Petroleum and coal products	4	85.29	5.16	2	104.42	6.90
Pulp, paper, and paperboard mills	5	81.67	4.94	4	65.04	4.30
Semiconductor and other electronic products	6	65.95	3.99	3	73.45	4.85
Fruit and vegetable preserves and specialty food	7	49.87	3.01	8	31.70	2.10
Basic chemicals	8	38.32	2.32	5	41.94	2.77
Animal slaughtering and processing	9	34.16	2.07	7	33.79	2.23
Other general purpose machinery	10	31.44	1.90	11	13.39	0.89
<b>Subtotal</b>		<b>1400.82</b>	<b>84.68</b>		<b>1343.60</b>	<b>88.80</b>
<b>Total</b>		<b>1654.17</b>	<b>100.00</b>		<b>1512.99</b>	<b>100.00</b>

Notes: 2005–2010 exports are the inflation-adjusted arithmetic mean of export values over the 6-year period. Share is Washington’s industry exports relative to Washington’s total exports to South Korea. The export value of Aluminum and Computer equipment industry, ranked 9th and 10th respectively during 2005–2010, were no longer listed in the top 10 in 2011.

Source: *The World Institute for Strategic Economic Research*

products. These are the largest export industries for Washington in general.

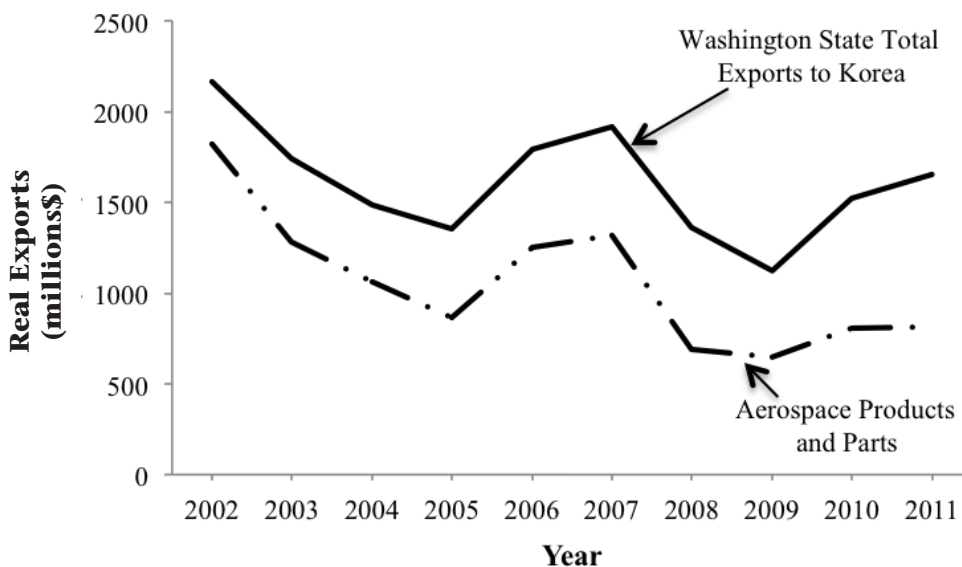
Given the dominance of the aerospace industry in Washington State’s export economy, it’s not surprising that it is the leading export industry to South Korea. But since tariff rates are not particularly relevant to this industry, it is unlikely that there will be any change in the export of aerospace products.

The changing composition of Washington’s exports can be seen when comparing the export averages of 2005 through 2010 to 2011. The relative industry exports to total manufacturing exports is shown in the “Share” column of Table 5A. While Washington’s exports to South Korea have been declining since 2002 (caused almost exclusively by a decrease in

aerospace exports), other industries have increased exports to the country. There has been a significant rise in exports of other types of fabricated metal products and navigation and measuring instruments (Figures 1 and 2).

Fabricated metals ranked 17th from 2005 through 2010, but ranked second in 2011. Aluminum and computer equipment were 9th and 10th respectively from 2005 to 2010, but were no longer in the top 10 in 2011. This instability in exports before the FTA took effect suggests that it will be difficult to forecast commodity-specific export growth as the FTA takes effect.

U.S. exports of cereal and meat products to South Korea are subjected to some of the highest tariffs: 40 percent for beef, 30 percent for potatoes, and 15 percent for wine. These



**Figure 1. Inflation-adjusted exports for Washington State aerospace products and parts and total exports to South Korea by year. (Source: Author’s calculations based on World Institute for Strategic Economic Research data.)**

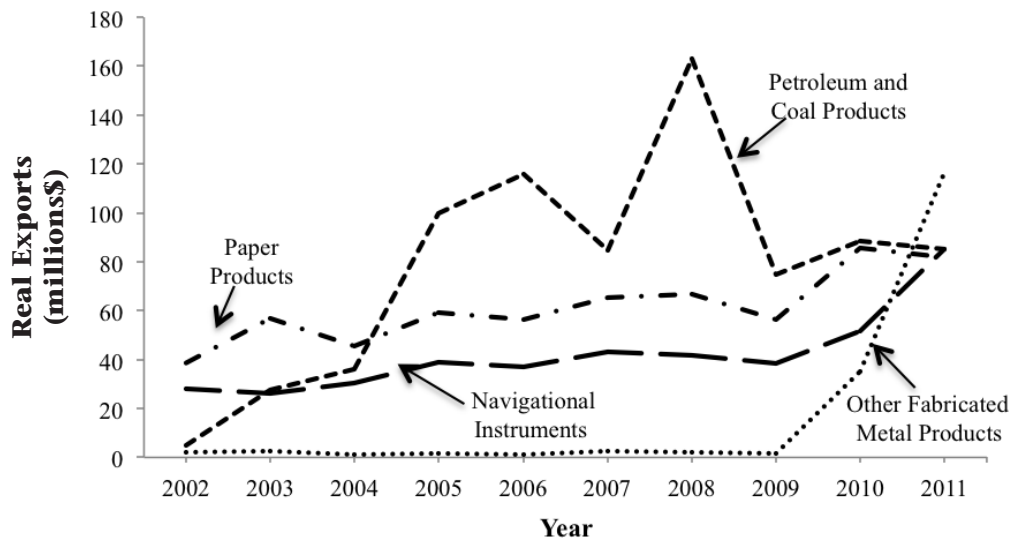


Figure 2. Inflation-adjusted exports for four Washington State industries to South Korea by year. (Source: Author's calculations based on World Institute for Strategic Economic Research data.)

Table 5B. Top 9 Washington processed agricultural export industries to South Korea

INDUSTRY	2011			2005–2010		
	Rank	Exports (millions\$)	Share (percent)	Rank	Exports (millions\$)	Share (percent)
Fruit and vegetable preserves and specialty food	1	49.87	44.92	2	31.70	32.83
Animal slaughtering and processing	2	34.16	30.77	1	33.79	35.00
Other food	3	16.04	14.45	4	10.62	11.00
Animal food	4	4.39	3.95	5	3.93	4.08
Dairy products	5	3.34	3.01	6	3.39	3.52
Grain and oilseed milling	6	2.68	2.41	3	11.28	11.68
Sugar and confectionary products	7	0.39	0.35	7	1.42	1.47
Bakeries and tortilla	8	0.11	0.10	9	0.16	0.16
Seafood product prep and packaging	9	0.04	0.04	8	0.25	0.26
<b>Total</b>		<b>111.02</b>	<b>100.00</b>		<b>96.55</b>	<b>100.00</b>

Notes: 2005–2010 exports are the inflation-adjusted arithmetic mean of export values over the 6-year period. Share is Washington's industry export relative to Washington's processed agricultural exports to South Korea.

Source: The World Institute for Strategic Economic Research

products are likely candidates for large gains in exports due to the FTA.

Exports of Washington's processed agricultural products increased by 15 percent in 2011 (compared to the 2005–2010 average) due to gains in fruit and vegetable preserves, animal slaughtering, and animal food (The processed agricultural products industry [NAICS 311] transforms livestock and agricultural products into products for intermediate or final consumption). The fruit and vegetable preserves industry experienced a 57 percent increase in exports, making it the number one processed agricultural export to South Korea. The exports of sauces and condiments, which are included in the "Other" food category, are likely to increase due to the complete elimination of the 8 percent tariff. Exports decreased in dairy products, grain and oilseed milling, sugar, bakery goods, and seafood (Table 5B).

## Recent Trade Patterns with Panama

Products imported by Panama mainly arrive from the United States, the European Union, China, Costa Rica, and Mexico. Panama's top export destinations are the United States, the European Union, Canada, Costa Rica, and China (IMF DOTS). In 2011, Panama had a total trade value of \$36.35 billion in inflation-adjusted value, with imports of \$21.80 billion and exports of \$14.55 billion. The country's leading imports are similar to its exports: antibiotics, medicaments, footwear, and apparel. One major difference in imports from exports is motor vehicles (Tables 6A and 6B).

The U.S. is Panama's largest trading partner. Panama's main exports to the United States include commodities not elsewhere specified, fish, gold, cane and beet sugar, and crustaceans (Table 7A). The value of these exports was over \$409.82 million in inflation-adjusted value

**Table 6A. Top 10 Panama import industries from all countries in 2011**

INDUSTRY	2011		
	HS Code	Imports (millions\$)	Share (percent)
Antibiotics	2941	3,488.84	16.00
Medicaments, therapeutic, prophylactic use, in dosage	3004	1,087.90	4.99
Motor vehicles for transport of persons	8703	642.40	2.95
Footwear with outer sole, upper rubber or plastic	6402	615.09	2.82
Women's and girls' suits, jackets, dresses, skirts	6204	478.39	2.19
Men's and boys' suits, jackets, trousers, not knit	6203	425.76	1.95
Perfumes and toilet waters	3303	367.21	1.68
Jerseys, pullovers, cardigans, knit or crochet	6110	319.12	1.46
Footwear with uppers of leather	6403	307.94	1.41
Television receivers, video monitors, projectors	8528	299.55	1.37
Subtotal		8,032.20	36.84
TOTAL		21,801.60	100.00

**Table 6B. Top 10 Panama export industries to all countries in 2011**

INDUSTRY	2011		
	HS Code	Exports (millions\$)	Share (percent)
Antibiotics	2941	3,554.62	24.42
Medicaments, therapeutic, prophylactic use, in dosage	3004	1,290.11	8.86
Footwear with outer sole, upper rubber or plastic	6402	598.43	4.11
Perfumes and toilet waters	3303	512.58	3.52
Women's and girls' suits, jackets, dresses, skirts	6204	409.68	2.81
Men's and boys' suits, jackets, trousers, not knit	6203	345.60	2.37
Footwear with uppers of leather	6403	295.14	2.03
Jerseys, pullovers, cardigans, knit or crochet	6110	290.95	2.00
Television receivers, video monitors, projectors	8528	281.94	1.94
Liqueur, spirits, and undenatured ethyl alcohol	2208	252.51	1.73
Subtotal		7,831.55	53.81
TOTAL		14,554.82	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) for all urban consumers with 2011 as a base year. Share is Panama's industry relative to Panama's total. Classifications of goods follow the Harmonized System (HS)—4 digit level code.

Source: UN Comtrade

(UN Comtrade). In 2011, the leading export industries from the U.S to Panama were non-crude petroleum oil, commodities not elsewhere specified, computers, motor vehicles, and nucleic acids, and had a value of \$8.24 billion (inflation-adjusted value)(Table 7B).

Washington's top manufacturing export industries to Panama are shown in Table 8A. The Share column shows individual industry exports relative to Washington's manufacturing total. The ten leading industries account for \$449.46 million in inflation-adjusted value. The aerospace industry dominates, comprising 94 percent of Washington's export totals at a value of \$429 million.

Washington exports to Panama decreased from 2003 to 2005, and then increased from 2008 to 2011. A similar trend occurred with exports from the aerospace industry, since it is the state's leading export industry. In fact, Wash-

ington exports very little to Panama outside of aerospace products.

In 2011, fruit and vegetable preserves were the largest processed agricultural export with a value of \$6.03 million and more than 80 percent of total processed agricultural exports (Table 8B). Fruit preserves, bakery items, and other food were the only three processed agricultural products that were consistently exported from 2005 to 2010.

Washington State exports to Panama may be considered sparse given that only 33 percent of industries exported from 2005 through 2010. The FTA's reduction of tariffs could open a new market for Washington goods, specifically for industries that have not historically exported to Panama. An increase in previously sparsely traded goods was seen with NAFTA. Aerospace exports to Panama are not likely to change with the FTA. Therefore, the export of

**Table 7A. Top 10 U.S. import industries from Panama in 2011**

INDUSTRY	2011		
	HS Code	Imports (millions\$)	Share (percent)
Commodities not elsewhere specified	9999	135.39	33.04
Fish, fresh or chilled, whole	0302	48.75	11.90
Gold, unwrought, semi-manufactured, powder form	7108	41.75	10.19
Solid cane or beet sugar and chemically pure sucrose	1701	39.42	9.62
Crustaceans	0306	32.76	7.99
Waste or scrap of precious metal	7112	18.34	4.47
Bananas, including plantains, fresh or dried	0803	15.71	3.83
Dates, figs, pineapple, avocado, guava, fresh or dried	0804	9.43	2.30
Coffee, coffee husks and skins, and coffee substitutes	0901	8.46	2.06
Aluminum waste or scrap	7602	5.36	1.31
Subtotal		355.37	86.71
TOTAL		409.82	100.00

**Table 7B. Top 10 U.S. export industries to Panama in 2011**

INDUSTRY	2011		
	HS Code	Exports (millions\$)	Share (percent)
Oils petroleum, bituminous, distillates, except crude	2710	3,887.64	47.14
Commodities not elsewhere specified	9999	850.56	10.31
Automatic data processing machines (computers)	8471	123.76	1.50
Motor vehicles for transport of persons	8703	107.10	1.30
Heterocyclic, nitrogen hetero atom only, nucleic acid	2933	106.90	1.30
Medicaments, therapeutic, prophylactic use, in dosage	3004	106.40	1.29
Radio and TV transmitters, television cameras	8525	96.44	1.17
Perfumes and toilet waters	3303	94.99	1.15
Maize (corn)	1005	91.04	1.10
Articles for fun-fairs, table, and parlor games	9504	75.36	0.91
Subtotal		5,540.21	67.17
TOTAL		8,247.89	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) for all urban consumers with 2011 as a base year. Share is U.S. industry relative to U.S. total. Classifications of goods follow the Harmonized System (HS)—4 digit level code.

Source: UN Comtrade

goods such as fruits and poultry are likely to be the only benefits of the FTA to Washington businesses.

## Recent Trade Patterns with Colombia

Colombia's principal import partners are the United States, China, Mexico, Brazil, France, and Germany. The primary destination of Colombian exports is the United States, followed by the Netherlands, Chile, China, and Panama (IMF DOTS). The overall value of Colombia's trade totaled \$111.62 billion, of which \$54.67 billion came from imports and \$56.95 billion from exports. Colombia's main imports are non-crude petroleum oil, motor vehicles, aircraft, computers, radio and TV transmitters (Table 9A). Its leading exports are crude and non-crude petroleum oils, coal, gold, coffee, and cut flowers (Table 9B).

Colombian products imported by the United States include crude and petroleum oils, gold, coffee, coal, and cut flowers (UN Comtrade) (Table 10A). Key products exported from the U.S. to Colombia are non-crude petroleum oil, commodities not elsewhere specified, computers, lifting parts, and polymers of ethylene (Table 10B). Similar to the import and export activities of South Korea and Panama, some of Colombia's major industries and products imported to the U.S. are also exported by the U.S. to Colombia.

In 2011, Washington State exports to Colombia increased by \$31.21 million when compared to 2010, a 74 percent increase in inflation-adjusted values. This large increase was preceded by a 16 percent decrease in exports in 2010. In general, exports to Colombia have been increasing since 2002.



**Table 8A. Top 10 Washington manufacturing export industries to Panama in 2011**

INDUSTRY	2011		
	Rank	Exports (millions\$)	Share (percent)
Aerospace products and parts	1	429.39	94.10
Fruit and vegetable preserves and specialty food	2	6.03	1.32
Other miscellaneous	3	3.64	0.80
Other general purpose machinery	4	2.81	0.62
Motor vehicles	5	1.86	0.41
Nav, meas, electromed, and control instruments	6	1.54	0.34
Agriculture, construction, and mining machinery	7	1.17	0.26
Veneer, plywood, and engineered wood products	8	1.06	0.23
Industrial machinery	9	1.06	0.23
Motor vehicle parts	10	0.90	0.20
	Subtotal	449.46	98.49
	Total	456.33	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) in the Seattle-Tacoma-Bremerton area for all urban consumers using 2011 as a base year. Share is Washington's industry relative to Washington's total.

**Table 8B. Top 5 Washington processed agricultural export industries to Panama in 2011**

INDUSTRY	2011		
	Rank	Exports (\$)	Share (percent)
Fruit and vegetable preserves and specialty food	1	6,028,510	81.84
Dairy products	2	833,510	11.31
Other food	3	354,282	4.81
Seafood product preparation and packaging	4	79,916	1.08
Bakeries and tortilla	5	70,326	0.95
	Subtotal	7,366,544	100.00
	Total	7,366,544	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) in the Seattle-Tacoma-Bremerton area for all urban consumers using 2011 as a base year. Share is Washington's industry relative to Washington's processed agricultural exports.

Source: *The World Institute for Strategic Economic Research*

**Table 9A. Top 10 Colombia import industries from all countries in 2011**

INDUSTRY	2011		
	HS Code	Imports (millions\$)	Share (percent)
Oils petroleum, bituminous, distillates, except crude	2710	3,794.18	6.94
Motor vehicles for transport of persons	8703	2,790.07	5.10
Aircraft, spacecraft, satellites	8802	2,659.11	4.86
Motor vehicles for the transport of goods	8704	1,688.62	3.09
Automatic data processing machines (computers)	8471	1,390.39	2.54
Radio and TV transmitters, television cameras	8525	1,033.76	1.89
Medicaments, therapeutic, prophylactic use, in dosage	3004	1,008.32	1.84
Maize (corn)	1005	926.95	1.70
Tractors	8701	850.76	1.56
Electric apparatus for line telephony, telegraphy	8517	825.87	1.51
Subtotal		16,968.02	31.03
TOTAL		54,674.82	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) for all urban consumers with 2011 as a base year. Share is Colombia's industry relative to Colombia's total. Classifications of goods follow the Harmonized System (HS)—4 digit level code. Source: *UN Comtrade*

**Table 9B. Top 10 Colombia export industries to all countries in 2011**

INDUSTRY	2011		
	HS Code	Exports (millions\$)	Share (percent)
Petroleum oils, oils from bituminous minerals, crude	2709	23,020.13	40.42
Coal, briquettes, ovoids, etc., made from coal	2701	7,856.41	13.79
Oils petroleum, bituminous, distillates, except crude	2710	4,564.52	8.01
Gold, unwrought, semi-manufactured, powder form	7108	2,774.92	4.87
Coffee, coffee husks and skins, and coffee substitutes	0901	2,657.52	4.67
Cut flowers, dried flowers for bouquets	0603	1,251.33	2.20
Ferro-alloys	7202	827.18	1.45
Bananas, including plantains, fresh or dried	0803	815.32	1.43
Solid cane or beet sugar and chemically pure sucrose	1701	593.87	1.04
Retort carbon, coke or semi-coke of coal, lignite, peat	2704	540.43	0.95
Subtotal		44,901.63	78.84
TOTAL		56,953.52	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) for all urban consumers with 2011 as a base year. Share is Colombia's industry relative to Colombia's total. Classifications of goods follow the Harmonized System (HS)—4 digit level code. Source: UN Comtrade

**Table 10A. Top 10 U.S. import industries from Colombia in 2011**

INDUSTRY	2011		
	HS Code	Imports (millions\$)	Share (percent)
Petroleum oils, oils from bituminous minerals, crude	2709	14,866.37	62.67
Gold, unwrought, semi-manufactured, powder form	7108	1,987.81	8.38
Oils petroleum, bituminous, distillates, except crude	2710	1,379.37	5.81
Coffee, coffee husks and skins, and coffee substitutes	0901	1,348.47	5.68
Coal, briquettes, ovoids, etc., made from coal	2701	854.62	3.60
Cut flowers, dried flowers for bouquets	0603	684.60	2.89
Commodities not elsewhere specified	9999	299.06	1.26
Bananas, including plantains, fresh or dried	0803	246.23	1.04
Mounted precious stones, not diamonds	7103	163.06	0.69
Extracts, essences, concentrates of tea, coffee	2101	122.85	0.52
Subtotal		21,952.46	92.54
TOTAL		23,721.50	100.00

**Table 10B. Top 10 U.S. export industries to Colombia in 2011**

INDUSTRY	2011		
	HS Code	Exports (millions\$)	Share (percent)
Oils petroleum, bituminous, distillates, except crude	2710	2,669.45	18.65
Commodities not elsewhere specified	9999	582.68	4.07
Automatic data processing machines (computers)	8471	548.04	3.83
Parts for use with lifting, moving machinery	8431	405.65	2.83
Polymers of ethylene, in primary forms	3901	282.02	1.97
Motor vehicles for the transport of goods	8704	262.43	1.83
Radio and TV transmitters, television cameras	8525	250.24	1.75
Self-propelled earth moving, road making machines	8429	247.02	1.73
Halogenated derivatives of hydrocarbons	2903	242.75	1.70
Wheat and meslin	1001	219.05	1.53
Subtotal		5,709.34	39.88
TOTAL		14,314.59	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) for all urban consumers with 2011 as a base year. Share is U.S. industry relative to U.S. total. Classifications of goods follow the Harmonized System (HS)—4 digit level code. Source: UN Comtrade

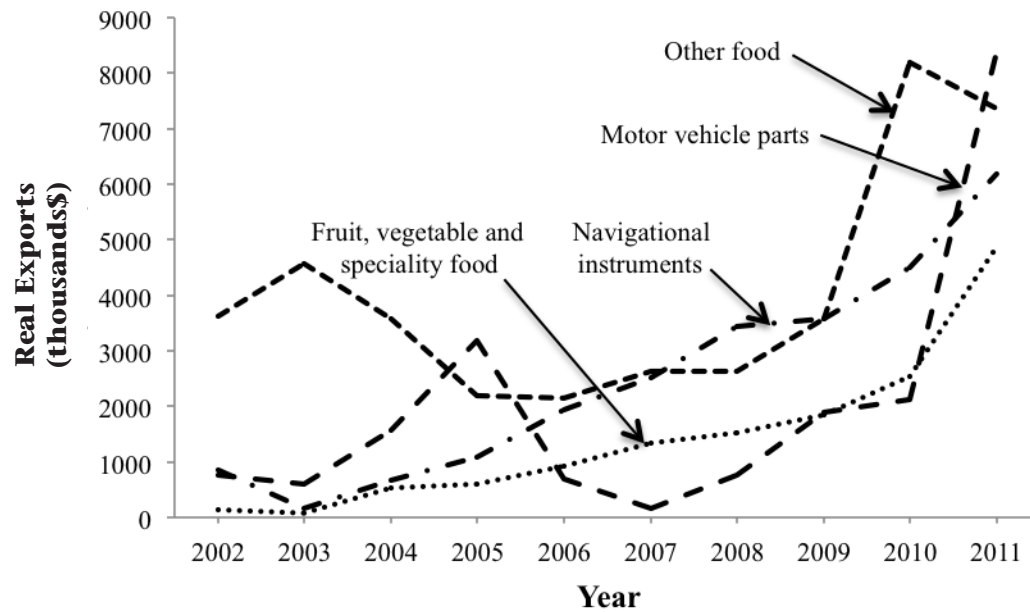


Figure 3. Inflation-adjusted exports for four Washington State industries to Colombia by year. (Source: Author's calculations based on World Institute for Strategic Economic Research data.)

Washington's top manufacturing exports in 2011 were audio and video equipment, motor vehicle parts, other food, navigational instruments, and fruit and vegetable preserves (Table 11A). The top 10 exported industries accounted for over \$57 million in inflation-adjusted export value, or approximately 80 percent of the total. State exports of audio and video equipment to Colombia totaled \$16.21 million, accounting for 22.44 percent of the total. This industry's exports were trivial before 2010, at \$3.73 million on average from 2005 to 2010. A similar rise in exports can be seen in motor vehicle parts (Figure 3).

The aerospace industry was not in the top five industries exporting to Colombia, however with the elimination of tariffs on exported aircraft and parts, it has potential to

expand. In fact, the decrease and/or elimination of tariffs suggest that the FTA may have a relatively large impact on Washington exports to Colombia. Another example is exported paper products, which were subjected to a 12.5 percent tariff. This industry is expected to increase its export volume due to the FTA, which completely eliminates such trade barriers.

Another leading import into Colombia from the United States is cereals. Currently wheat is subjected to a 5 to 20 percent tariff, which will be eliminated completely with the new FTA. Washington's wheat exports to Colombia are expected to increase under the FTA. The leading export industries in the processed agricultural products category in 2011 were other food, and fruits and vegetable preserves (Table 11B). The other food group includes indus-

Table 11A. Top 10 Washington manufacturing export industries to Colombia in 2011

INDUSTRY	2011		
	Rank	Exports (millions\$)	Share (percent)
Audio and video equipment	1	16.21	22.44
Motor vehicle parts	2	8.38	11.61
Other food	3	7.37	10.21
Nav, meas, electromed, and control instruments	4	6.19	8.56
Fruit and vegetable preserves and specialty food	5	4.88	6.76
Pulp, paper, and paperboard mills	6	4.06	5.62
Other electrical equipment and components	7	3.35	4.63
Agricultural, construction, and mining equipment	8	2.60	3.60
Other general purpose machinery	9	2.56	3.55
Electrical equipment	10	2.07	2.87
	Subtotal	57.68	79.85
	Total	72.24	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) in the Seattle-Tacoma-Bremerton area for all urban consumers using 2011 as a base year. Share is Washington's industry relative to Washington's total. Source: The World Institute for Strategic Economic Research

**Table 11B. Top 7 Washington processed agricultural export industries to Colombia in 2011**

INDUSTRY	2011		
	Rank	Exports (\$)	Share (percent)
Other food	1	7,372,680.00	59.16
Fruit and vegetable preserves and specialty food	2	4,879,917.00	39.15
Grain and oilseed milling	3	98,661.00	0.79
Animal slaughtering and processing	4	95,712.00	0.77
Dairy products	5	7,462.00	0.06
Bakeries and tortilla	6	5,430.00	0.04
Sugar and confectionery products	7	3,381.00	0.03
	Subtotal	12,463,243.00	99.97
	Total	12,463,243.00	100.00

Notes: 2011 values are inflation-adjusted using the Consumer Price Index (CPI) in the Seattle-Tacoma-Bremerton area for all urban consumers using 2011 as a base year. Share is Washington's industry relative to Washington's total.

Source: *The World Institute for Strategic Economic Research*

tries with different productive processes, such as snack food manufacturing, coffee and tea manufacturing, concentrate, syrup, condiment, and spice manufacturing. This industry is the dominant exporter in the processed foods category. It exported \$7.37 million, or about 59 percent of the total. This industry is followed by fruit and vegetable preserves, at 39 percent.

Similar to Panama, Washington does not export a broad scope of goods to Colombia. Only 39 percent of industries consistently exported goods from 2005 to 2010. Given the new FTA, the potential for exporting a broader range of goods is excellent.

## Summary

The free trade agreements that went into effect between the United States and South Korea, Panama, and Colombia may be important to Washington State businesses considering expanding to new markets and opportunities. Aerospace exports dominate trade from Washington to South Korea and Panama, but this industry is unlikely to see large gains due to the FTAs. Export gains are more likely for Washington's processed agricultural industries. Washington exports to Panama and Colombia are currently sparse in that only 33 percent of the goods that Washington could export are being consistently traded. Given the experience of NAFTA, it is possible that the FTAs could increase exports of these sparsely traded goods rather than dramatically affect the trade volume of goods that are currently being traded at large levels.

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