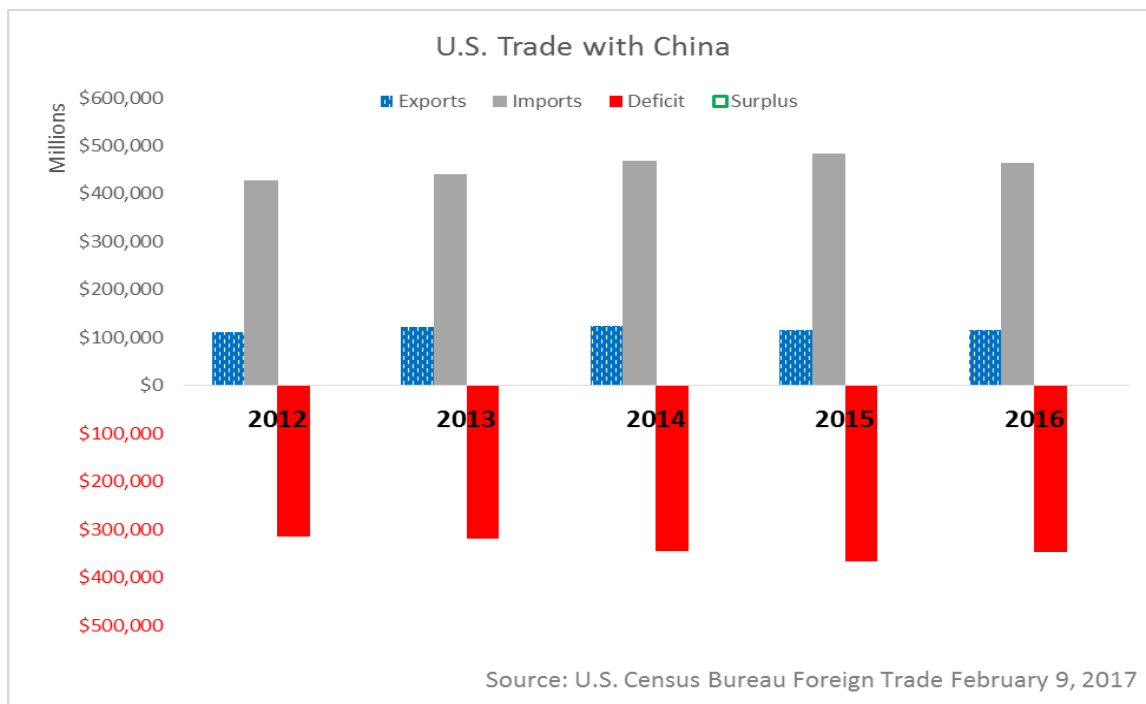




I. Total U.S. Trade with China

In 2016, U.S. exports to China totaled \$115.8 billion, a 0.3% (\$296.6 million) decrease from 2015; U.S. imports from China totaled \$462.8 billion, a 4.2% (\$20.4 billion) decrease; and the trade deficit was \$347.0 billion, a 5.5% (\$20.1 billion) decrease.



	2012	2013	2014	2015	2016	Five-year Average
EXPORTS	\$110,516.6	\$121,746.2	\$123,620.7	\$116,071.8	\$115,775.1	\$117,988.8
<i>Δvalue</i>	<i>\$6,395.1</i>	<i>\$11,229.6</i>	<i>\$1,874.5</i>	<i>-\$7,548.9</i>	<i>-\$296.6</i>	
<i>Δpct</i>	<i>6.1%</i>	<i>10.2%</i>	<i>1.5%</i>	<i>-6.1%</i>	<i>-0.3%</i>	
IMPORTS	\$425,619.1	\$440,430.0	\$468,483.9	\$483,244.7	\$462,813.0	\$454,444.4
<i>Δvalue</i>	<i>\$26,247.9</i>	<i>\$14,810.9</i>	<i>\$28,053.9</i>	<i>\$14,760.8</i>	<i>-\$20,431.7</i>	
<i>Δpct</i>	<i>10.3%</i>	<i>3.5%</i>	<i>6.4%</i>	<i>3.2%</i>	<i>-4.2%</i>	
BALANCE	(\$315,102.5)	(\$318,683.8)	(\$344,863.2)	(\$367,172.9)	(\$347,037.9)	(\$336,455.6)
<i>Δvalue</i>	<i>\$34,663.7</i>	<i>(\$3,581.4)</i>	<i>(\$26,179.4)</i>	<i>(\$22,309.7)</i>	<i>\$20,135.1</i>	
<i>Δpct</i>	<i>11.7%</i>	<i>1.1%</i>	<i>8.2%</i>	<i>6.5%</i>	<i>-5.5%</i>	

Values in Millions of U.S. Dollars. Source: U.S. Census Bureau Foreign Trade February 9, 2017



Of the \$115.8 billion in U.S. exports to China in 2016, the top commodity sectors were machinery and mechanical appliances (22.2%), transportation equipment (20.5%) and agriculture products (18.2%).

Of the \$462.8 billion in U.S. imports from China in 2016, the top commodity sectors were machinery and mechanical appliances (48.9%) and textiles and footwear (12.5%).

Imports from CHINA by Sector	U.S. Commodity Trade with CHINA for 2016	US exports to CHINA by Sector
\$462,813,000,460	Total Value All Commodities	\$115,775,122,278
1.44%	Agriculture (Chapters 01-24)	18.20%
0.22%	Minerals (Chapters 25-27)	3.35%
8.36%	Chemicals, Plastics, Leather (Chapters 28-43)	14.33%
2.05%	Wood Products (Chapters 44-49)	5.96%
12.51%	Textiles and Footwear (Chapters 50-67)	5.96%
2.10%	Stone, Glass, & Semiprecious Metals (Chapters 68-71)	1.11%
5.02%	Base Metals (Chapters 72-83)	4.52%
48.92%	Machinery (Chapter 84-85)	20.51%
3.21%	Transportation (Chapters 86-89)	22.16%
2.74%	Optical, Measuring, Medical or Other instruments (Chapters 90-92)	7.17%
0.03%	Arms and Ammunition (Chapter 93)	0.00%
12.14%	Miscellaneous Manufactured Items (Chapter 94-96)	0.47%
0.07%	Art & Antiques (Chapter 97)	0.07%
1.18%	Special Items (Chapters 98-99** imports only 98)	0.88%
Source: US Census Bureau, February 9, 2017		



II. Exports to China subject to US Government Filing Requirements

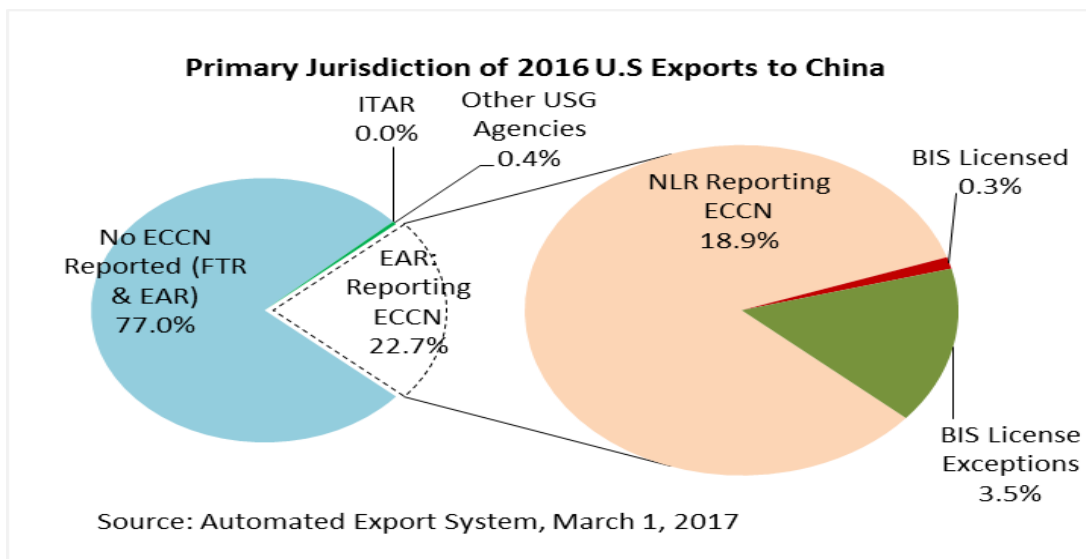
Of the \$115.8 billion in U.S. exports to China in 2016:

- 3.74% were subject to a BIS license requirement
 - 0.26% were exported under a BIS license; Worldwide, 0.5% were exported under a BIS license.
 - 3.48% were exported under a BIS license exception; Worldwide, 1.6% were exported under a BIS license exception.
- 18.9% were exported under No License Required with an ECCN; Worldwide, 12.2% were exported under No License Required with an ECCN.

	2014	2015	2016
Department of State	\$0.3	\$0.4	\$0.8
Other USG Agencies	\$830	\$2,868	\$450.8
Department of Commerce	\$123,537.4	\$115,784.6	\$115,324.0
BIS Licensed	\$495.5	\$479.7	\$299.8
BIS License Exceptions	\$2,724.3	\$3,773.0	\$4,028.1
NLR reporting an ECCN	\$18,812.9	\$20,816.2	\$21,871.9
NLR not reporting an ECCN	\$101,504.8	\$90,715.7	\$89,124.1
600-Series ".Y" Paragraph NLR	\$0.0	\$0.0	\$0.0

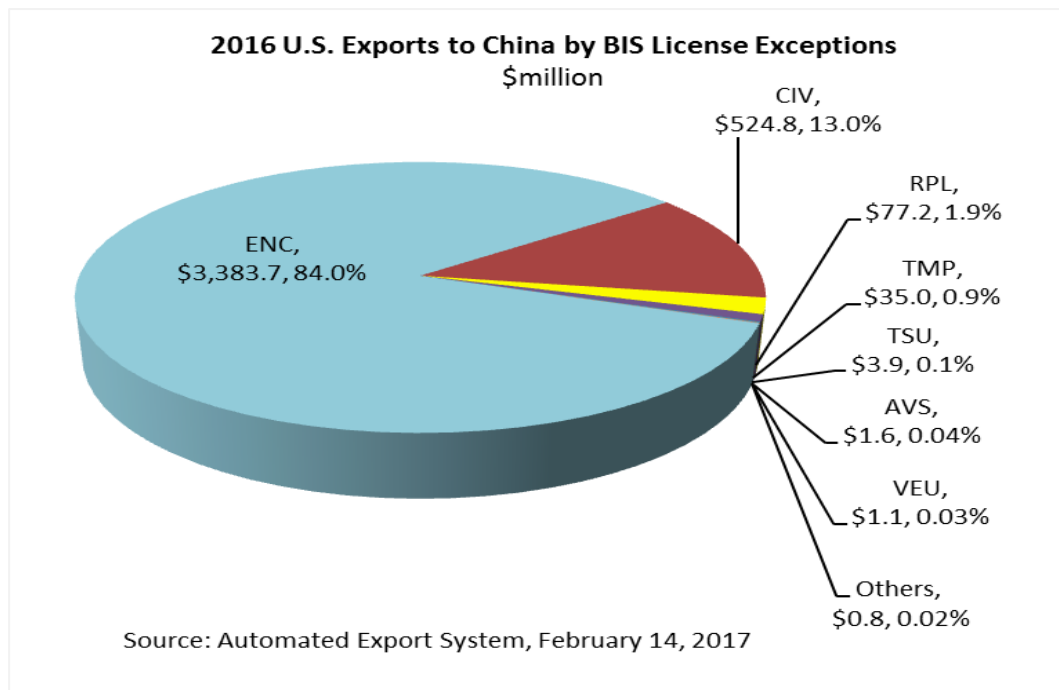
Values in Millions of US Dollars Source: Automated Export System February 10 2017

Reasons for Control	Chemical and Biological Weapons			Nuclear Nonproliferation		National Security		Missile Tech	Regional Stability		Firearms Convention	Crime Control			Anti-Terrorism	
	CB:1	CB:2	CB:3	NP:1	NP:2	NS:1	NS:2	MT:1	RS:1	RS:2	FC:1	CC:1	CC:2	CC:3	AT:1	AT:2
China	X	X	X	X		X	X	X	X	X		X		X		



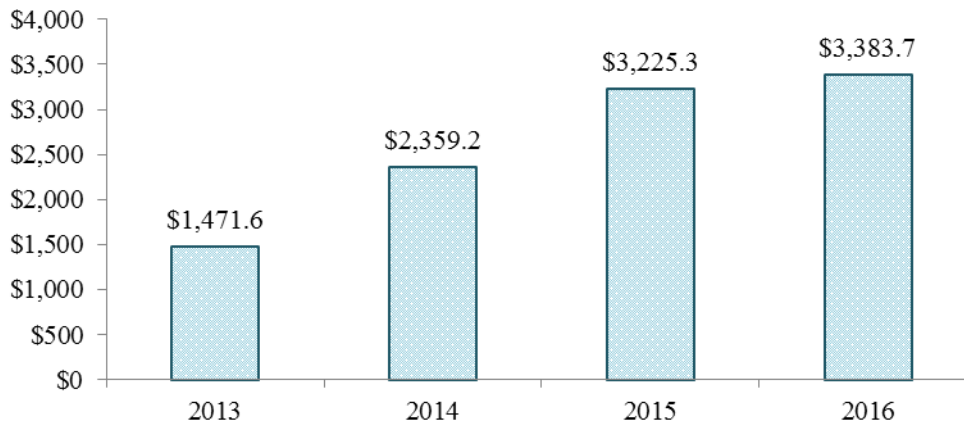


In 2016, U.S. exports to China shipped under a BIS license exception totaled \$4.0 billion, a 6.8% (\$255.1 million) increase from 2015. The top license exception Encryption commodities, Software and Technology (ENC) totaled \$3.4 billion (84.0% of all license exceptions).





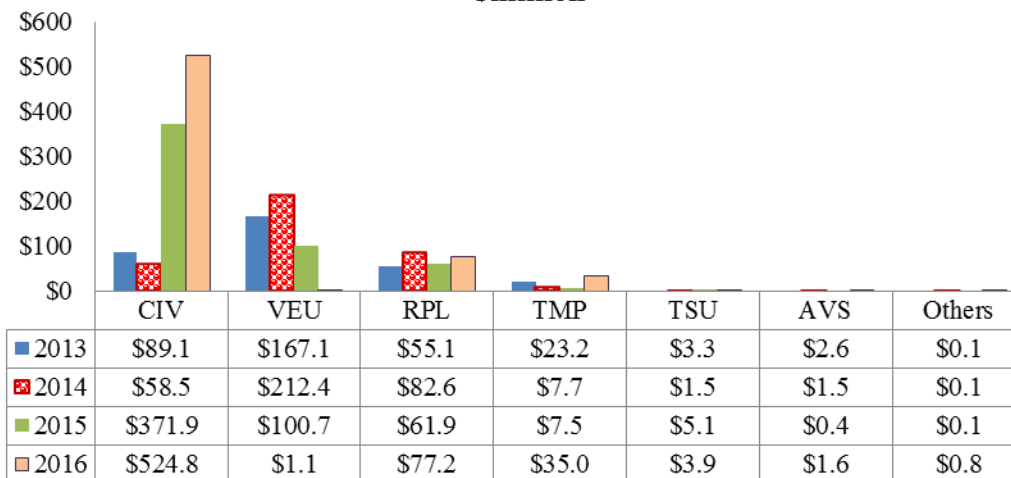
U.S. Exports to China under BIS License Exception Encryption Commodities, Software and Technology
\$million



Source: Automated Export System, February 14, 2017

The U.S. exports to China under Civil End-users (CIV) increased significantly from \$58.5 million in 2014 to \$371.9 million in 2015 and to \$524.8 million in 2016. This increase in CIV is the result of more exports classified under 3B001 for equipment for the manufacturing of semiconductor devices or materials.

U.S. Exports to China under BIS License Exceptions
\$million



Note: Excluding ENC

Source: Automated Export System, February 14, 2017



Top Ten ECCNs by Value to China (\$million)

LICENSED	#1	3A233 Mass Spectrometers
	#2	9A001 Aero Gas Turbine Engines
	#3	2B230 Pressure Transducers
	#4	2B001 Numerical Control Units/Motion Control Boards
	#5	2B352 Equip. for Handling Biological Materials
	#6	3B001 Epitaxial Equip. for Semiconductors
	#7	3C002 Resist Materials
	#8	2B350 Chemical Manufacturing Facilities and Equip.
	#9	3C004 Hydrides of Phosphorus, Arsenic, Or Antimony
	#10	1C350 Chemicals, Precursors for toxic Chemical Agents

Top Ten ECCNs by Value to China (\$million)

EXCEPTIONS	#1	5A002 Systems/Equip./Integrated Circuits for Info Sec
	#2	3B001 Epitaxial Equip. for Semiconductors
	#3	9A991 Aircraft and Certain Gas Turbine Engines N.E.S.
	#4	N/A ECCN not Reported
	#5	5D002 Software for Information Security
	#6	7A103 Instrumentation, Navigation Equip./Systems Not
	#7	5B002 Test/Inspection/Production Equip for Information S
	#8	6C004 Optical Materials as Follows (See List of Items Co...
	#9	1C006 Fluids and Lubricating Materials
	#10	3C005 Silicon Carbide Wafers

Top Ten ECCNs by Value to China (\$million)

NLR with ECCN	#1	9A991 Aircraft and Certain Gas Turbine Engines N.E.S.
	#2	5A992 Information Security Equip.
	#3	3B991 Other Mfg/Test Equip. Not Controlled By 3B
	#4	5A991 Transmission Items Not W/I Parameters In 5A001
	#5	3A991 Electronic Devices and Components
	#6	3B992 Equip. for the Inspection/Testing of Components
	#7	4A994 Items Not Controlled By 4A001/4A002/4A003
	#8	3A999 Specific Processing Equip., N.E.S.
	#9	7A994 Other Navigation/Airborne Communication Equip.
	#10	9B990 Vibration Test Equip. and "Specially Designed" "Pa...



Top Ten ECCNs by Shipment Count to China

LICENSES

#1	2B230	Pressure Transducers
#2	2B350	Chemical Manufacturing Facilities and Equip.
#3	3A233	Mass Spectrometers
#4	3A001	Electronic Devices/Components
#5	1C350	Chemicals, Precursors for toxic Chemical Agents
#6	3B001	Epitaxial Equip. for Semiconductors
#7	1A004	Protective and Detection Equip.
#8	2B352	Equip. for Handling Biological Materials
#9	6A005	Optical Equip. (Lasers)
#10	3C004	Hydrides of Phosphorus, Arsenic, Or Antimony

Top Ten ECCNs by Shipment Count to China

EXCEPTIONS

#1	5A002	Systems/Equip./Integrated Circuits for Info Sec
#2	3B001	Epitaxial Equip. for Semiconductors
#3	9A991	Aircraft and Certain Gas Turbine Engines N.E.S.
#4	5D002	Software for Information Security
#5	7A103	Instrumentation, Navigation Equip./Systems Not
#6	EAR99	Items subject to the EAR that are not elsewhere controlled
#7	3A001	Electronic Devices/Components
#8	1C006	Fluids and Lubricating Materials
#9	5D992	Software Not Controlled By 5D002
#10	N/A	ECCN not Reported

Top Ten ECCNs by Shipment Count to China

NLR with ECCN

#1	9A991	Aircraft and Certain Gas Turbine Engines N.E.S.
#2	5A992	Information Security Equip.
#3	3B991	Other Mfg/Test Equip. Not Controlled By 3B
#4	5A991	Transmission Items Not W/I Parameters In 5A001
#5	3A991	Electronic Devices and Components
#6	4A994	Items Not Controlled By 4A001/4A002/4A003
#7	3A999	Specific Processing Equip., N.E.S.
#8	2B999	Specific Processing Equip., N.E.S.
#9	3A992	General Purpose Electronic Equip.
#10	7A994	Other Navigation/Airborne Communication Equip.

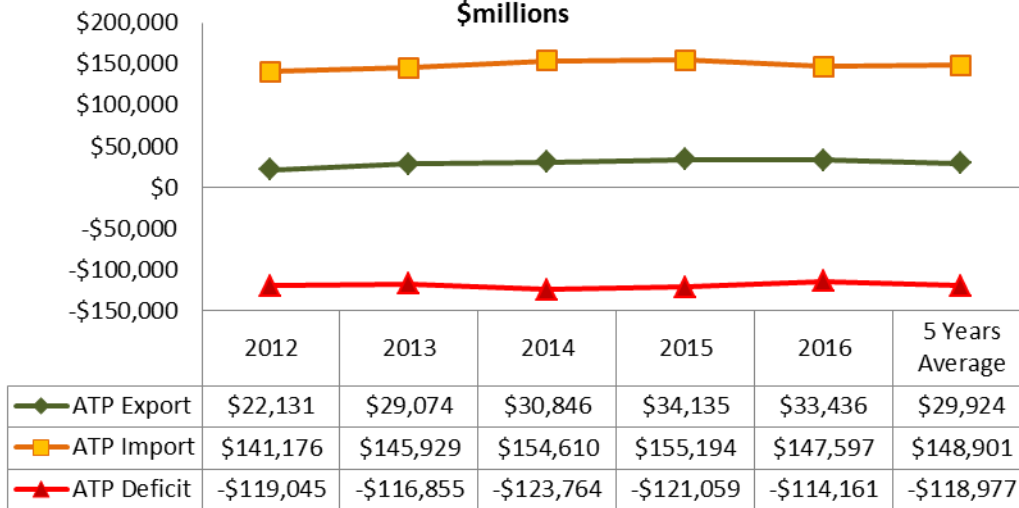


Analysis of U.S. - China Trade in Advanced Technology Products (ATP)

III. U.S. – China Trade in Advanced Technology Products

In 2016, U.S. ATP exports to China totaled \$33.4 billion, a 2.0% (\$699 million) decrease from 2015; U.S. ATP imports from China totaled \$147.6 billion, a 4.9% (\$7.6 billion) decrease; and the trade deficit was \$114.2 billion, a 5.7% (\$6.9 billion) decrease.

**U.S. Trade with China in Advanced Technology Products
2012 - 2016
\$millions**



	2012	2013	2014	2015	2016	5 Years Average
ATP Export	\$22,131	\$29,074	\$30,846	\$34,135	\$33,436	\$29,924.4
Value Change from previous year	\$1,998	\$6,943	\$1,772	\$3,289	-\$699	\$2,660.6
% Change	9.9%	31.4%	6.1%	10.7%	-2.0%	11.2%
ATP Import	\$141,176	\$145,929	\$154,610	\$155,194	\$147,597	\$148,901.2
Value Change from previous year	\$11,688	\$4,753	\$8,681	\$584	-\$7,597	\$3,621.8
% Change	9.0%	3.4%	5.9%	0.4%	-4.9%	2.8%
ATP Deficit	-\$119,045	-\$116,855	-\$123,764	-\$121,059	-\$114,161	-\$118,976.8
Value Change from previous year	-\$9,691	\$2,190	-\$6,909	\$2,705	\$6,898	-\$961.4
% Change	8.9%	-1.8%	5.9%	-2.2%	-5.7%	1.0%

Value in Millions of U.S. Dollars

Source: The U.S. Census Bureau, Trade Statistics, retrieved on March 2, 2017

Note: Advanced Technology Products: about 500 of some 22,000 commodity classification codes contain products from a recognized high technology category (e.g., biotechnology).



Analysis of U.S. - China Trade in Advanced Technology Products (ATP)

In 2016, the largest categories of U.S. ATP exports to China included Aerospace at \$14.6 billion (43.7% of the total ATP exports); Electronics at \$6.0 billion (18.0%); and Information and Communication at \$4.8 billion (14.4%).

Compared with 2015, there was an 18.8% increase in Biotechnology and a 7.1% decrease in Information and Communications.

In 2016, 29.0% (\$33.6 billion) of U.S. exports to China were considered ATP items. Of these, 0.3% were exported under a BIS license and 11.5% were exported under a BIS license exception.

U.S. ATP Exports to China 2012-2016 (\$millions)							
ATP Category	2012	2013	2014	2015	2016	% of the Total	% change from 2015
Biotechnology	283	400	497	717	852	2.5%	18.8%
Life Science	2,758	3,011	3,112	3,311	3,447	10.3%	4.1%
Opto-Electronics	327	401	392	465	467	1.4%	0.4%
Information & Communications	3,920	4,680	4,616	5,177	4,809	14.4%	-7.1%
Electronics	4,004	4,840	5,549	6,023	6,004	18.0%	-0.3%
Flexible Manufacturing	1,998	2,650	2,458	2,532	2,769	8.3%	9.4%
Advanced Materials	294	181	177	211	231	0.7%	9.5%
Aerospace	8,437	12,668	13,978	15,481	14,623	43.7%	-5.5%
Nuclear Technology	109	243	67	215	231	0.7%	7.4%
Grand Total	22,131	29,074	30,846	34,135	33,436	100.0%	-2.0%

Source: The U.S. Census Bureau, Trade Statistics, March 2, 2017

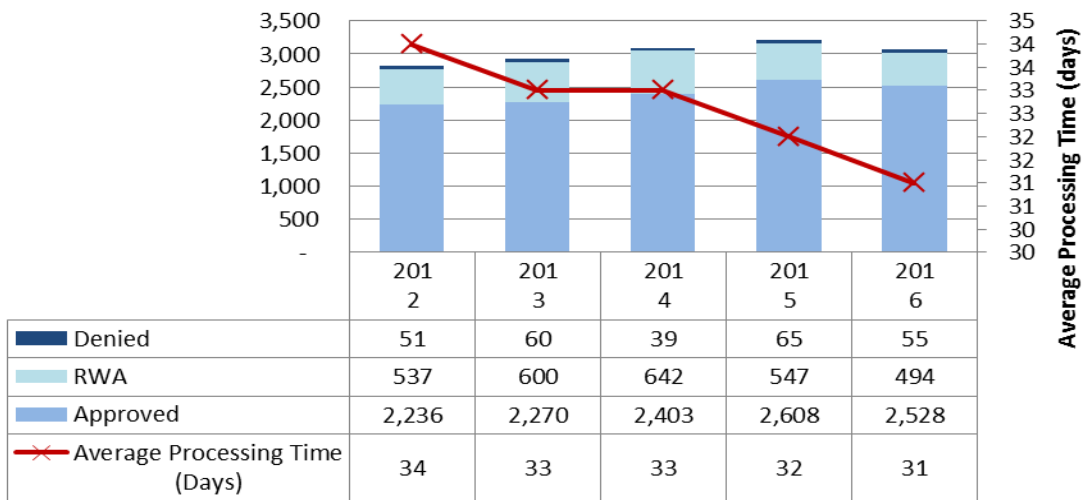


IV. BIS Licensing to China

In 2016, BIS reviewed 3,077 export/re-export applications (not including deemed export applications) valued at \$6.4 billion for China, out of a total of 33,195 applications worldwide valued at \$235.4 billion.

- Approved applications for China totaled 2,528 (82.2% of the total applications) for \$4.1 billion, compared to the 28,214 (85.0%) approved applications for all destinations that totaled \$210.3 billion.

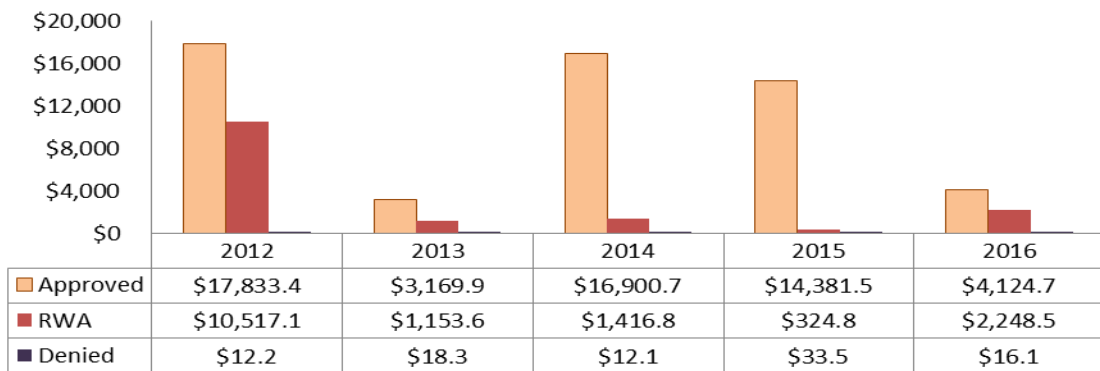
Licenses for Tangible Items, Software and Technology for China by Count 2012-2016



Source: Commerce U.S. Exports Exporter Support System, February 7, 2017

Note: Figures above do not include deemed export applications

Licenses for Tangible Items, Software and Technology for China by Value 2012 - 2016 \$millions



Source: Commerce U.S. Exports Exporter Support System, February 7, 2017