

**Section 232 National Security Investigation: Imports of Automobiles and Automotive Parts**



**SCOPE OF ASSESSMENT**

The Bureau of Industry and Security (BIS), Office of Technology Evaluation (OTE), is conducting a survey of the armored vehicle industry. The survey, requested by the Office of the Secretary of the U.S. Department of Commerce, will be used to support an investigation initiated under Section 232 of the Trade Expansion Act of 1962, as amended. The investigation was requested by the President of the United States.

The principal goal of this survey is to assist the Commerce Department in assessing the domestic armored vehicle industry and the impact of automotive parts imports on armored vehicle industry supply chains, research and development, and labor force, and other factors relevant to Section 232 analysis. Information collected will include facilities and production data, joint ventures, trade flows, supply chain data, sales and demand data, employment information, conditions of competition, research and development information, and government and defense activities. The resulting aggregate data will give the Commerce Department detailed industry information that is otherwise not publicly available and needed to effectively conduct its analysis.

**RESPONSE TO THIS SURVEY IS REQUIRED BY LAW**

A response to this survey is required by law (50 U.S.C. Sec. 4555). Failure to respond can result in a maximum fine of \$10,000, imprisonment of up to one year, or both. Information furnished herewith is deemed confidential and will not be published or disclosed except in accordance with Section 705 of the Defense Production Act of 1950, as amended (50 U.S.C. Sec. 4555). Section 705 prohibits the publication or disclosure of this information unless the President determines that its withholding is contrary to the national defense. Information will not be shared with any non-government entity, other than in aggregate form. The information will be protected pursuant to the appropriate exemptions from disclosure under the Freedom of Information Act (FOIA), should it be the subject of a FOIA request.

Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number.

**BURDEN ESTIMATE AND REQUEST FOR COMMENT**

Public reporting burden for this collection of information is estimated to average 30 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information to BIS Information Collection Officer, Room 6883, Bureau of Industry and Security, U.S. Department of Commerce, Washington, D.C. 20230, and to the Office of Management and Budget, Paperwork Reduction Project (OMB Control No. 0694-0120), Washington, D.C. 20503.

**BUSINESS CONFIDENTIAL - Per Section 705(d) of the Defense Production Act**

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**General Instructions**

Your organization is required to complete this survey of the armored vehicle industry using an Excel template, which can be downloaded from the BIS website: <http://bis.doc.gov/autos232>

A. If you are not able to download the survey document, at your request, Commerce staff will e-mail the Excel survey template directly to you.

For your convenience, a PDF version of the survey and required drop-down content is available on the BIS website to aid internal data collection. DO NOT SUBMIT the PDF version of the survey as your response to BIS. Should this occur, your organization will be required to resubmit the survey in the requested Excel format.

B. Respond to every question. Surveys that are not fully completed will be returned for completion. Use the comment boxes to provide any information to supplement responses provided in the survey form. Make sure to record a complete answer in the cell provided, even if the cell does not appear to expand to fit all of the information.

DO NOT CUT AND PASTE RESPONSES WITHIN THIS SURVEY OR PASTE IN RESPONSES FROM OUTSIDE THE SURVEY. Survey inputs should be completed by typing in responses or by using a drop-down menu. The use of cut and paste can corrupt the survey template. If your survey response is corrupted as a result of cut and paste responses, a new survey will be sent to your organization for immediate completion.

D. **Do not disclose any USG classified information in this survey form.**

E. Upon completion of the survey, final review, and certification, **transmit the survey document via e-mail to:** [autos232@doc.gov](mailto:autos232@doc.gov).

F. Questions related to the survey should be directed to BIS survey support staff at [autos232@doc.gov](mailto:autos232@doc.gov).

E-mail is the preferred method of contact.

You may also speak with a member of the BIS survey support staff by calling (202) 482-4358.

G. For questions related to the overall scope of this Industrial Base assessment, contact [autos232@doc.gov](mailto:autos232@doc.gov) or:

Brad Botwin, Director, Industrial Studies  
Office of Technology Evaluation, Room 1093  
U.S. Department of Commerce  
1401 Constitution Avenue, NW  
Washington, DC 20230

DO NOT submit completed surveys to Mr. Botwin's postal or personal e-mail address. All surveys must be submitted electronically to [autos232@doc.gov](mailto:autos232@doc.gov).

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Term	Definitions
Advanced Battery	The cells, modules/arrays, internal cooling loops, control and balancing boards and pack cases meeting performance capabilities for some or all motive power in any interstate highway capable vehicles for the model years they are commercially marketed.
Advanced Battery Cells	The battery cells meeting performance capabilities for some or all motive power in any interstate highway capable vehicles for the model years they are commercially marketed.
Applied Research	A systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met. This activity includes work leading to the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes.
Armored Vehicle	For purposes of this questionnaire, "armored vehicle" refers to motorized armored fighting vehicles intended for military activities, including all-terrain vehicles, tactical vehicles, transport vehicles and cargo vehicles, but not including tanks.
Authorizing Official	An executive officer of the organization or business unit or another individual who has the authority to execute this survey on behalf of the organization.
Autonomy	Technology related to vehicles with any electronic system that influences the lateral or longitudinal operation (or both) of a vehicle meeting SAE levels 2-5 for driving automation.
Auto parts	All components for production/assembly of passenger cars, SUVs, vans and light trucks, including engines and engine parts, electrical and electronic equipment, steering and suspension components, brake systems, transmission and power train parts, seating and interior trim, metal stampings, and other parts and accessories. Also includes rebuilt motor vehicle parts.
Basic Research	A systematic, scientific study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts.
Body and Frame	The main body panels, secondary panels, structural panels, frames, subframes, door lids and hinges.
Braking Systems	Disks, pads, drums, shoes, lines, hoses, calipers, master cylinders, seals, power boosters, anti-lock brake controls, sensors and related components.
Capital Expenditures	Investments made by an organization in buildings, equipment, property, and systems where the expense is depreciated. This does not include expenditures for consumable materials, other operating expenses, and salaries associated with normal business operations.
Connectivity/Connected Car	Ability to exchange digital information between a vehicle and other entities (e.g., another vehicle, infrastructure); vehicles that are able to communicate, either directly or through intermediaries, with other vehicles, infrastructure, and devices.
Design Facility	A space or studio with personnel who use design software, intellectual property, supporting computer systems, engineering and other information technology to create auto parts and automobiles, including cars, SUVs, vans and light trucks.
Development	The design, simulation, and testing of a prototype, including experimental software or hardware systems, to validate technological feasibility or concept of operation in order to reduce technological risk, or provide test systems prior to production approval.
Drive Components	The axle shafts, housings, hubs, carriers, differentials and related subassemblies such as gears, bearings, springs, gaskets and seals.
Electric Drive Motors	Any electric motors used to provide some or all motive power.
Electrical Systems	Lights, alternators, starters, window motors, switches, relays and related wiring.
Electrification	Technology for vehicles receiving some degree of motive power via electrical energy and an electric motor; includes hybrid, plug-in hybrid, electric, and fuel-cell vehicles.
Electronics and Controls	Power electronics, controls (except fuel management and anti-lock brake), infotainment systems, modules, inverters, and advanced battery charging system components.
Exports	Shipments to destinations outside the United States, including shipments to NAFTA countries and to related firms.
Fuel Management Systems	The major engine bay fuel system components including injectors, throttles and controls.
Full Time Equivalent (FTE) Employees	Employees who work for 40 hours in a normal work week. Convert part-time employees into "full time equivalents" by taking their work hours as a fraction of 40 hours.
Global Headquarters	A location that serves as the firm's hub of worldwide operations with all global corporate branches or divisions reporting to it.
Import Value	Values reported should be landed, duty paid values at the U.S. port of entry, including ocean freight and insurance costs, brokerage charges, and import duties (i.e., all charges except inland freight in the United States).
Interior Systems	Seats, liners, carpeting, consoles, panels, dashes and related interior components.
Light Truck	Motor vehicle manufactured primarily for the transport of goods; any truck or "truck derivative" with a gross vehicle weight rating (GVWR) of 8,500 pounds or less, and a vehicle curb weight (VCW) of 6,000 pounds or less; includes pickup trucks (non-passenger automobiles with passenger compartment and an open cargo area). Covers the following HTS codes: 8704210000, 8704310000, 8704310000.
Lightweighting	Mass reduction of vehicles through the minimization of materials or substitution of materials with lower density and volume.
Manufacturing	Engaging in the mechanical, physical, or chemical transformation of materials, substances, or components into automotive parts, passenger cars, SUVs, vans and light trucks at a manufacturing facility. Includes vehicle assembly operations.
Manufacturing facility	An establishment that uses an array of equipment, components, systems, and labor to transform designs into automotive parts and/or passenger cars, SUVs, vans and light trucks.
Non-U.S. Facility	A facility that is physically located outside of the United States.
Organization	A company, firm, laboratory, or other entity that owns or controls one or more U.S. establishment(s) capable of designing and/or manufacturing automotive products.
Passenger Car	Motor vehicle manufactured primarily for use in transportation of fewer than ten persons; includes two- and four-door sedans, hatchbacks, station wagons, cross-utility vehicles, and, two-seater sports cars. For this survey's purposes, the definition principally covers HTS 8703, excluding SUV's, minivans and vans.
Product/Process Development	Conceptualization and development of an automotive part, system or whole vehicle prior to the production of the product for customers (i.e., consumers, tier-one suppliers, automakers, etc.).
Research and Development	Basic and applied research in the engineering sciences, as well as design and development of prototype products and processes. Efforts that an organization conducts towards innovating, introducing and/or improving products and processes.
Sales	Reported sales including sales to distributors.
Steering and Suspensions Systems	The steering column, steering gears/racks, control units, related linkages such as tie rods and the shock absorbers, springs, struts, control arms, sway bars, knuckles and related bushings.
SUV (Sport Utility Vehicle)	Motor vehicle built using a "body on frame" construction principally designed for the transport of fewer than ten persons.
Supplier	An entity from which your organization obtains inputs, which may be goods or services. A supplier may be another firm with which you have a contractual relationship, or it may be another facility owned by the same parent organization.
Turbos and Superchargers	Forced induction devices driven by exhaust, belts or electric motors.
United States	The "United States" or "U.S." includes the 50 states, Puerto Rico, the District of Columbia, Guam, the Trust Territories, and the U.S. Virgin Islands.
U.S. Sales	Shipments made within the United States as a result of an arm's length commercial transaction in the ordinary course of business. Report net values (i.e., gross sales values less all discounts, allowances, rebates, prepaid freight, and the value of returned goods) in U.S. dollars, F.O.B. your point of shipment.
Van	Covered, boxlike motor vehicle with an enclosed cargo space not exceeding five metric tons; typically has a rear door and sliding doors on the side panels, used for transporting goods or fifteen or fewer persons.
Vehicle	For the purposes of this survey, vehicles (or autos) mean passenger cars, vans, SUVs, and light trucks, consistent with the definitions above.

**1a: Organization Information**

Provide the following information for your organization	
Organization Name	john jones
Street Address	
City	
State	
Zip Code	
Location of Global Headquarters	
U.S. Point of Contact Name	
U.S. Point of Contact Email	
U.S. Point of Contact Phone	

Is this organization owned, in whole or in part, by any private or government entity? Indicate Yes/No, then identify the entities below, if applicable. List entities with at least 5% ownership.						
	Entity Name	Global Headquarters Street Address	Global Headquarters City	Global Headquarters State/Province	Global Headquarters Country	Ownership %
B.						

At the global headquarters level, identify the total number of armored vehicle manufacturing and/or assembly facilities, product development and design facilities, and research and development facilities that your firm currently operates.			
C.	Activity	Number of U.S. Facilities	Number of Non-U.S. Facilities
	Manufacturing/Assembly of Armored Vehicles		
	Product Development & Design		
	Research & Development		

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1b: Facility Information

U.S. Facilities

Identify the total number of facilities that your organization operates in the United States involved in the manufacture, assembly, product development and design, and/or R&D of armored vehicles:

Input field for U.S. facilities count

List, in order of total production value, the top 20 of your organization's armored vehicle manufacture, assembly, development & design, and R&D facilities located in the United States, identifying each facility's name, city, state, scope of work (dropdown), and any expected change in operations (e.g. expansion, worker layoffs, etc.) from 2018-2022. Report the 2017 production volume in units.

Table with 8 columns: U.S. Facility Name, City, State, Principal Scope of Work, Secondary Scope of Work, Expected Change 2018-2022, 2017 Production Volume of Armored Vehicles, in Units. Rows 1-20.

If any of your U.S. facilities will be closing from 2018-2022, provide the reasons:

Non-U.S. Facilities

Identify the total number of facilities that your organization operates outside the United States involved in the manufacture, assembly, product development and design, and/or R&D of armored vehicles:

Input field for Non-U.S. facilities count

List, in order of total production value, the top 20 of your organization's armored vehicle manufacture, assembly, development & design, and R&D facilities located outside the United States, identifying each facility's name, city, country, scope of work (dropdown), and any expected change in operations (e.g. expansion, worker layoffs, etc.) from 2018-2022. Report the 2017 production volume in units.

Table with 8 columns: Non-U.S. Facility Name, City, Country, Principal Scope of Work, Secondary Scope of Work, Expected Change 2018-2022, 2017 Production Volume of Armored Vehicles, in Units. Rows 1-20.

If any of your non-U.S. facilities will be closing from 2018-2022, provide the reasons:

**1c: Changes in U.S. Facility Operations, 2013 - Q2 2018**

Identify any U.S. facility closings, relocations, contractions, expansions, corporate acquisitions or consolidations, or other major changes in U.S. operations since January 1, 2013. For each change, provide the location, reasons for the change in operations (e.g., loss of market share to imports, loss of market share to domestic competition, declining demand, low profitability, firm restructuring), and units of vehicles, as well as number of full-time-equivalent (FTE) employees impacted. Denote reductions with a "-" symbol.

	Location	Type of Change	Date of Change	Units of Vehicles Impacted	FTEs Impacted	Explanation
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
	Comments:					

**2a: Production**

At the global headquarters level, identify the quantity (in units) of armored vehicles produced annually and sold in the United States at both your U.S. and non-U.S. facilities.

Units Produced at U.S. Facilities and Sold in the U.S.							
A.		2013	2014	2015	2016	2017	2018 (Jan - Jun)
	Armored Vehicles (U.S.)						
Units Produced at Non-U.S. Facilities and Sold in the U.S.							
B.	Type of Motor Vehicle/Part	2013	2014	2015	2016	2017	2018 (Jan - Jun)
	Armored Vehicles (non-U.S.)						

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**2b: Production (Continued)**

For U.S. operations, provide the production, sales, and average unit value (AUV) data for each year below.

**Armored Vehicles**

	Item	2013	2014	2015	2016	2017	2018 (Jan - Jun)
A.	Average Production Capacity (Units)						
	Production (Units)						
	U.S. Sales/Shipments (Units)						
	U.S. Sales/Shipments (\$)						
	Export Sales/Shipments (Units)						
	Export Sales/Shipments (\$)						
	AUV U.S. Auto Parts Content*						

\*AUV U.S. Auto Parts Content: Provide the average unit value of U.S. auto parts content, expressed as the percentage of the purchase cost of U.S.-originating auto parts used for U.S. armored vehicle production operations (numerator) over the cost of good sold (COGS) of the finished armored vehicle (denominator).

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**2c: Constraints to Operations**

For each vehicle sold in the U.S. or part type consumed for vehicles sold in the U.S., indicate whether your organization's production of the item or acquisition/purchase of the item has ever been constrained since 2013, providing an explanation for each. Explanations should include the products affected, specific reasons for constraints, and years associated with the constraint. See definitions page for details on automotive parts.

Auto or Part Type	Constraint to Organization's U.S. Production	Explanation	Constraint to Organization's External Acquisition	Explanation
Armored Vehicles			No	
Engines - 4 Cylinder				
Engines - 6 Cylinder				
Engines - 8 or More Cylinder				
Transmissions - 7 or Fewer Gears			Not Applicable	
Transmissions - 8 or More Gears				
Bodies and Frames				
Drive Components				
Steering & Suspension Systems				
Advanced Batteries			Not Applicable	
Fuel Management Systems				
Electronics and Controls				
Electrical Systems				
Braking Systems				
Interior Systems				
Other				

Has your organization had difficulty obtaining and/or servicing manufacturing equipment required for the production of armored vehicles or automotive parts? If Yes, explain below and identify the countries of origin for the equipment.

No

For the manufacturing equipment that your organization uses at U.S. production facilities, estimate the percentage (in units) that is supplied by manufacturers based in the United States. Provide explanations for each detailing reasons for using equipment supplied by non-U.S. manufacturers.

Equipment	U.S. %	Explanation for Using Non-US Suppliers
Machine Tools - Engines		
Machine Tools - Transmissions/Transaxles		
Body Panels/Structural Component - Stamping & Forming Presses/Tooling		
Machine Tools - Large Gears		
Production Operations - Design & Operations Software		
Production Line Control Systems		
Computer-Controlled Assembly Line Vehicle Transport Systems		
Robotic Welders		
Robotic Paint Systems		
Wheel Alignment Systems		
Other		
Other		

**3: Financial Statement - U.S. Operations**

Report the requested information, in thousands of U.S. dollars, for your organization's U.S. Operations

Income Statement (Select Items)		2013	2014	2015	2016	2017	2018 Jan - Jun
A	Total Sales Revenue Earned on all U.S. Sales						
1	Revenue - Armored Vehicles						
B	Total COGS for All U.S. Sales						
1	COGS - Armored Vehicles						
C	Gross Profit (Loss) for all U.S. operations (including U.S. sales and exports)						
D	Selling, General, and Administrative (SG&A) Expenses (inc. U.S. sales and exports)						
E	Total Operating Income (Loss) (including U.S. sales and exports)						
F	Other Income & Expenses (inc. Interest Expenses) (inc. U.S. sales and exports)						
G	Net Income (Loss) Before Taxes (including U.S. sales and exports)						
Balance Sheet (Select Items)		2013	2014	2015	2016	2017	2018 Jan - Jun
A	Cash and Cash Equivalents						
B	Inventory						
C	Current Assets						
D	Total Assets						
E	Current Liabilities						
F	Total Liabilities						
G	Retained Earnings						
H	Total Owner's Equity						

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**4a: Exports**

Identify the top 10 export destinations (by 2017 export volume) for your organization's U.S.-produced armored vehicles, and list the total units exported each year.

**Armored Vehicles (Units Exported)**

		Export Destination Country	2013	2014	2015	2016	2017	2018 (Jan - Jun)
A	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							

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**4b: Imports**

If your company imports any armored vehicles, identify the top 10 countries of import (by 2017 import volume) for each.

**Armored Vehicles (Units Imports)**

		Country of Import	2013	2014	2015	2016	2017	2018 (Jan - Jun)
A.	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							

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**5a: Supply Chain**

For each type of auto part input, identify the total number of Original Equipment Suppliers (OESs) from which your organization sourced parts in 2017, and list the top five OESs by supplier name, country of headquarters, country of part manufacture, whether the OES is affiliated with your organization (5% or more shared ownership), the number of units acquired in 2017, and the value of parts acquired in 2017. Then, for each supplier rate (from 1 to 4, with 1 being Most Important and 4 being Least Important) how important price, tariffs, product availability, and performance/quality are in deciding to use this supplier.

		Engines: 4 Cylinder			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
A	1										
	2										
	3										
	4										
	5										
		Engines: 6 Cylinder			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
B	1										
	2										
	3										
	4										
	5										
		Engines: 8 or More Cylinder			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
C	1										
	2										
	3										
	4										
	5										
		Transmissions: 7 or Fewer Gears			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
D	1										
	2										
	3										
	4										
	5										
		Transmissions: 8 or More Gears			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
E	1										
	2										
	3										
	4										
	5										

**5b: Supply Chain**

For each type of auto part input, identify the total number of Original Equipment Suppliers (OESs) from which your organization sourced parts in 2017, and list the top five OESs by supplier name, country of headquarters, country of part manufacture, whether the OES is affiliated with your organization (5% or more shared ownership), the number of units acquired in 2017, and the value of parts acquired in 2017. Then, for each supplier rate (from 1 to 4, with 1 being Most Important and 4 being Least Important) how important price, tariffs, product availability, and performance/quality are in deciding to use this supplier.

		Bodies and Frames			Total OESs:			Reason for Preferring Supplier (Rank Each 1-4)			
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
A	1										
	2										
	3										
	4										
	5										
		Drive Components			Total OESs:			Reason for Preferring Supplier (Rank Each 1-4)			
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
B	1										
	2										
	3										
	4										
	5										
		Steering & Suspension Systems			Total OESs:			Reason for Preferring Supplier (Rank Each 1-4)			
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
C	1										
	2										
	3										
	4										
	5										
		Advanced Batteries			Total OESs:			Reason for Preferring Supplier (Rank Each 1-4)			
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
D	1										
	2										
	3										
	4										
	5										
		Fuel Management Systems			Total OESs:			Reason for Preferring Supplier (Rank Each 1-4)			
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
E	1										
	2										
	3										
	4										
	5										

**5c: Supply Chain**

For each type of auto part input, identify the total number of Original Equipment Suppliers (OESs) from which your organization sourced parts in 2017, and list the top five OESs by supplier name, country of headquarters, country of part manufacture, whether the OES is affiliated with your organization (5% or more shared ownership), the number of units acquired in 2017, and the value of parts acquired in 2017. Then, for each supplier rate (from 1 to 4, with 1 being Most Important and 4 being Least Important) how important price, tariffs, product availability, and performance/quality are in deciding to use this supplier.

		Electronics and Controls			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
A	1										
	2										
	3										
	4										
	5										
		Electrical Systems			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
B	1										
	2										
	3										
	4										
	5										
		Braking Systems			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
C	1										
	2										
	3										
	4										
	5										
		Interior Systems			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
D	1										
	2										
	3										
	4										
	5										
		Other			Total OESs:	Reason for Preferring Supplier (Rank Each 1-4)					
		Supplier Name	Country of Headquarters	Country of Manufacture	Affiliated?	Units Acquired	Value of Parts Acquired	Price	Tariffs	Product Availability	Quality
E	1										
	2										
	3										
	4										
	5										



**6: Domestic and Foreign Sourcing**

For each auto part type sourced and used for armored vehicle assembly in the U.S. by your organization, estimate the average percent (based on units sourced) of the parts that are manufactured in the U.S., Canada, and Mexico for each of the years 1985, 1995, 2005, and 2015. Then, provide reasons for your organization's decisions to source auto parts from foreign countries (e.g., domestic source unavailable, foreign source offers lower price, higher quality, etc.)

Part Type	Estimated Percent of Auto Parts Manufactured in the U.S.				Estimated Percent of Auto Parts Manufactured in Canada				Estimated Percent of Auto Parts Manufactured in Mexico				Explanation and Reasons for Sourcing from Outside the U.S., Canada, or Mexico
	1985	1995	2005	2015	1985	1995	2005	2015	1985	1995	2005	2015	
Engines - 4 Cylinder													
Engines - 6 Cylinder													
Engines - 8 or More Cylinder													
Transmissions - 7 or Fewer Gears													
Transmissions - 8 or More Gears													
Bodies and Frames													
Drive Components													
Steering & Suspension Systems													
Advanced Batteries													
Fuel Management Systems													
Electronics and Controls													
Electrical Systems													
Braking Systems													
Interior Systems													
Other													

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**7: Joint Ventures and Foreign Trade Zones**

Joint Ventures

From 2013 - Q2 2018, record the total number of joint ventures and other business partnerships related to armored vehicle assembly, development & design, and R&D, including public/private partnerships, in which your organization participated.

Identify your organization's 10 most recent joint venture relationships, including any other type of public/private R&D partnerships.

	Partner Organization and Partnership Entity Name	% of Shares Held by Partner Organization	Country of JV/Partnership	Year Initiated	Primary Work Scope	Primary Purpose of Relationship	Explain
A 1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

U.S. Foreign Trade Zones (FTZs)

In how many U.S. FTZs does your organization produce or admit vehicles?

If one or more, describe the locations and nature of your organization's vehicle U.S. FTZ operations, then identify the number of units produced in U.S. FTZs, as well as the number ultimately entered from U.S. FTZs into the U.S. stream of commerce each year.

B FTZ Operation Location and Description:			2013	2014	2015	2016	2017	2018	
			Units Produced in FTZs						
			Units Entered into U.S. Commerce						

**8: U.S. Employment**

From 2013 - Q2 2018, record your organization's annual Total Full Time Equivalent (FTE) Employees in the United States involved in armored vehicle manufacture, assembly, product design and development, and R&D activities. Then record the same data for each occupational category.

	2013	2014	2015	2016	2017	2018 Jan-Jun
Total FTE Employees in the U.S.						
Average Weekly Hours Worked by FTE Employees						
Administrative, Management, and Legal Staff						
Engineers, Scientists, and R&D Staff						
Information Technology/Cybersecurity						
Marketing and Sales						
Production Line Workers						
Testing Operators, Quality Control, and Support Technicians						

Does your organization have difficulty hiring and/or retaining its armored vehicle-related employees?

Estimate the percentage of your employees involved in armored vehicle production that have been directly recruited from or have a background in the automotive industry (i.e., have previous experience working for automakers or auto parts suppliers).

For each occupation category, specify the kind of difficulty your organization faces, number of current unfilled vacancies, average length of time positions remain unfilled (in weeks), and primary reason for unfilled vacancies. Explain your response.

	Difficulty	Number of Vacancies	Average Weeks Vacant	Explanation
Administrative, Management, and Legal Staff				
Engineers, Scientists, and R&D Staff				
Information Technology/Cybersecurity				
Marketing and Sales				
Production Line Workers				
Testing Operators, Quality Control, and Support Technicians				

Comments

9: Competition and Demand Trends

A

From your organization's perspective, explain how demand within the United States and outside of the United States for armored vehicles has changed from 2013 to Q2 2018. Explain any trends and describe the principal factors that have affected these changes in demand.

Market	Overall Change	Explanation and Factors
Within the United States		
Outside the United States		

How has import competition affected your U.S. manufacturing operations, sales, employment, planned expansions, investments, etc. with respect to the production of armored vehicles from 2013 to Q2 2018. Please be as specific as possible.

B.

From 2013 to Q2 2018, has your organization experienced any negative effects on its return on investment or its growth, investment, ability to raise capital, existing development and production efforts, or the scale of capital investments as a result of imports of armored vehicles into the United States? Indicate Yes/No to the right and explain below.

Does your organization anticipate any negative effects on its business due to future imports of armored vehicles into the United States? Indicate Yes/No to the right and explain below.

Describe the top 5 largest challenges to the competitive position of your organization in the global armored vehicles market.

- 1
- 2
- 3
- 4
- 5

Describe the top 5 largest challenges to the competitive position of your organization in the U.S. armored vehicles market.

- 1
- 2
- 3
- 4
- 5

C

Describe the top 5 barriers to armored vehicles innovation for your organization in the global market.

- 1
- 2
- 3
- 4
- 5

Describe the top 5 barriers to armored vehicles innovation for your organization in the U.S. market.

- 1
- 2
- 3
- 4
- 5

**10a: Research & Development**

From 2013 - Q2 2018, report your organization's Global and U.S. R&D dollar expenditures and report the listed component expenditures on a percentage basis. Also report your organization's global and U.S. R&D funding sources on a dollar basis and component expenditures on a percentage basis.

		Record \$ in Thousands, e.g. \$12,000.00 = survey input of \$12					
		2013	2014	2015	2016	2017	2018 Jan - Jun
A	1 Total Global R&D Expenditures						
	2 Total Global Armored Vehicle R&D Expenditures						
	a Global Autonomy R&D (as a % of A2)						
	b Global Connectivity R&D (as a % of A2)						
	c Global Electrification R&D (as a % of A2)						
	d Global Lightweighting R&D (as a % of A2)				2%		
e Other (as a % of A2) (specify here)							
		2013	2014	2015	2016	2017	2018 Jan - Jun
B	1 Total U.S. R&D Expenditures						
	2 Total U.S. Armored Vehicle R&D Expenditures						
	a U.S. Autonomy R&D (as a % of B2)						
	b U.S. Connectivity R&D (as a % of B2)						
	c U.S. Electrification R&D (as a % of B2)						
	d U.S. Lightweighting R&D (as a % of B2)						
e Other (as a % of B2) (specify here)							
		2013	2014	2015	2016	2017	2018 Jan - Jun
C	1 Total Global R&D Funding Sources						
	a Internal/Parent Company (as a % of C2)						
	b U.S. Federal Government (as a % of C2)						
	c State and Local Government (as a % of C2)						
	d U.S. Private Equity (includes industry and university) (as a % of C2)						
	e Foreign Government (as a % of C2)						
	f Foreign Non-Government (as a % of C2)						
	g Other (as a % of C2) (specify here)						
2 Total of a-g (must equal 100%)	0%	0%	0%	0%	0%	0%	
		2013	2014	2015	2016	2017	2018 Jan - Jun
D	1 Total U.S. R&D Funding Sources						
	a Internal/Parent Company (as a % of D2)						
	b U.S. Federal Government (as a % of D2)						
	c U.S. State and Local Government (as a % of D2)						
	d U.S. Private Equity (includes industry and university) (as a % of D2)						
	e Foreign Government (as a % of D2)						
	f Foreign Non-Government (as a % of D2)						
	g Other (as a % of D2) (specify here)						
2 Total of a-g (must equal 100%)	0%	0%	0%	0%	0%	0%	

**10b: Research & Development (Continued)**

For each technology listed below, identify your firm's top five R&D partners in 2017, public or private, in terms of overall R&D expenditures, provide the primary location of the R&D, list of all countries the R&D is carried out in, and an explanation of the R&D activities.

Autonomy					
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D
A	1				
	2				
	3				
	4				
	5				

Connectivity					
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D
B	1				
	2				
	3				
	4				
	5				

Electrification					
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D
C	1				
	2				
	3				
	4				
	5				

Lightweighting					
	Partner Name	Global Headquarters	Primary Location of R&D	List of Countries R&D Carried Out In	Explanation of R&D
D	1				
	2				
	3				
	4				
	5				

E From 2013 to Q2 2018, describe in detail constrains on global R&D activities (for example, inadequate revenue), and explain additional R&D activities that would occur absent those constraints.

F From 2013 to Q2 2018, describe in detail constraints on U.S. R&D activities (for example, inadequate revenue), and explain additional R&D activities that would occur absent those constraints.

**11: Economic Downturn Information**

Provide the following data estimates for your organization's U.S. activities during the economic downturn starting in 2007. Your estimates should pertain to your manufacturing, assembly, and sales of armored vehicles. The profit/loss data you provide in this table should be on the same basis as the data provided in Section 3 of this survey. Dollar figures should be provided in thousands.

	2007	2008	2009	2010
Gross Profit/Loss (\$1,000)				
Operating Income/Loss (\$1,000)				
Net Income/loss before income taxes (\$1,000)				
A Total U.S. sales quantities of armored vehicles (units)				
Total U.S. sales values of armored vehicles (\$1,000)				
Total COGS for U.S. sales of armored vehicles (\$1,000)				
R&D spending (\$1,000)				
Capital Expenditure spending (\$1,000)				
Amount of assistance received from related companies in U.S. or abroad (specify company name and country) (\$1,000)				
Amount of assistance received from government entities in U.S. or abroad (specify entity name and country) (\$1,000)				

B During the global economic downturn in 2007 – 2010, describe cutbacks in global R&D spending, if any, by R&D activity type and the percentage of decline in global R&D expenditures compared to 2004-2006

C During the global economic downturn in 2007 – 2010, describe cutbacks in U.S. R&D spending, if any, by R&D activity type and the percentage of decline in U.S. R&D expenditures compared to 2004-2006

D During the global economic downturn in 2007 – 2010, describe cutbacks in global capital spending, if any, by capital activity type and the percentage of decline in global capital expenditures compared to 2004-2006

E During the global economic downturn in 2007 – 2010, describe cutbacks in U.S. capital spending, if any, by capital activity type and the percentage of decline in U.S. capital expenditures compared to 2004-2006

**Section 12a: Support of U.S. Government (USG) - Agencies**

Indicate all U.S. Government departments and agencies your organization has supported, directly or indirectly, from 2013 - Q2 2018 (including all affiliated laboratories). Then indicate the primary type of product associated with this support.

	Agency Name	Support	Primary Type of Support
	U.S. Air Force (USAF)		
	U.S. Army		
	U.S. Navy		
	U.S. Marine Corps (USMC)		
	U.S. Department of Energy (DOE)		
A	U.S. Department of Homeland Security (DHS)		
	U.S. Department of State		
	U.S. DOD Defense Advanced Research Projects Agency (DARPA)		
	U.S. DOD Missile Defense Agency (MDA)		
	U.S. Intelligence Community (e.g. CIA, NGA, NRO, NSA, DNI, etc.)		
	National Aeronautics and Space Administration (NASA)		
	Other Agency	(specify here)	
	Other Agency	(specify here)	
	Other Agency	(specify here)	
	Comments:		



**12b: Global and Defense Activities**

		-Yes/No-	Explain
A	Has your organization ever designed, developed, or manufactured, individually or in collaboration with other private or government partners, any product specifically for military purposes?		
B	Does your organization currently design, develop, or manufacture, individually or in collaboration with other private or government partners, any product specifically for military purposes? If your organization has previously done so but no longer does, provide an explanation for the reasons for the change.		
C	Does your organization sell any products directly to a U.S. defense agency?		
D	Does your organization sell any products directly to a foreign defense agency?		
E	Indicate whether your organization performs any R&D that is funded by or in cooperation with a U.S. government agency, then describe all such activities.		
F	Indicate whether your organization performs any R&D that is funded by or in cooperation with a foreign government agency, then describe all such activities.		

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**12c: Advanced Technology**

From your organization's perspective, for the technologies listed below, rank their importance to the development of future armored vehicle products over the next 10 years for each of the vehicle types described

Advanced Technology Requirements	Current Level of R&D Investment	Importance		
		Conventional Vehicles	Electric Vehicles	Autonomous Vehicles
1 Advanced Electric Drive - Motor				
2 Advanced Electric Drive - Transmission				
3 Advanced Batteries				
4 Hydrogen Fuel Cells				
5 Battery Management Systems				
6 Power Electronics				
7 Power Generating Shock Absorbers				
8 Improved Regenerative Braking Systems				
9 Collision Avoidance Systems - LIDAR				
10 Collision Avoidance Systems - Radar				
11 Directional Mapping/Global Positioning				
12 Guidance Systems				
13 Jam-Resistant Dedicated Short-Range Communications (DSRC) technology				
14 Vehicle-to-Vehicle Communications				
15 Automotive Electromagnetic Interference Filters				
16 Advanced Microprocessors Availability				
17 Sensor Fusion Integrated Electronics				
18 High-Fidelity Antennas				
19 Integrated Braking and Steering Control Systems				
20 Lightweighting				
21 Sensor Systems - Light Detection and Ranging (LIDAR) detection and ranging,				
22 Sensor Systems - Other Optical				
23 Sensor Systems - Other Radar				
24 Sensor Systems - Discriminating Directional Sensors				
25 Sensor Systems - Object Recognition/Vehicle Recognition				
26 Sensor Systems - Driver Behavior/Human Factors				
27 Software & Algorithm Tools				
28 Systems Simulation Tools				
29 Power Electronics Simulation Software				
30 Software Validation Tools				
31 Other				
32 Other				

Comments

**13: Certification**

The undersigned certifies that the information herein supplied in response to this questionnaire is complete and correct to the best of his/her knowledge. It is a criminal offense to willfully make a false statement or representation to any department or agency of the United States Government as to any matter within its jurisdiction (18 U.S.C. 1001 (1984 & SUPP. 1197)).

Once your organization has completed this survey, save a copy and submit it via email to [autos232@doc.gov](mailto:autos232@doc.gov). Be sure to retain your survey for your records and to facilitate any necessary edits or clarifications.

BIS Survey Website <https://www.bis.doc.gov/autos232>

Organization Name	
Organization's Internet Address	
Name of Authorizing Official	
Title of Authorizing Official	
E-mail Address	
Phone Number and Extension	
Date Certified	

In the box below, provide any additional comments or any other information you wish to include regarding this survey assessment.

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How many hours did it take to complete this survey?	
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