

2018 President's Budget  
Food Safety and Inspection Service

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## Food Safety and Inspection Service

### Purpose Statement

The Secretary of Agriculture established the Food Safety and Inspection Service (FSIS) on June 17, 1981, pursuant to legislative authority contained in 5 U.S.C. 301 that permits the Secretary to issue regulations governing the United States Department of Agriculture (USDA). The mission of FSIS is to protect the public's health by ensuring the safety of meat, poultry, and processed egg products. FSIS is composed of two major inspection programs: (1) Meat and Poultry Inspection and (2) Egg Products Inspection.

1. The Meat and Poultry Inspection Program is authorized by the Federal Meat Inspection Act (FMIA) as amended and the Poultry Products Inspection Act (PPIA). The purpose of the program is to ensure that meat and poultry products are safe, wholesome, and correctly labeled through inspection and regulation of these products so that they are suitable for commercial distribution for human consumption. FSIS also enforces the Humane Methods of Slaughter Act through the program, which requires that all livestock at Federally-inspected establishments be handled and slaughtered in a humane way.

FSIS conducts inspection activities at Federally-inspected meat and poultry establishments; and for State programs, the agency ensures that State meat and poultry inspection programs have standards that are at least equivalent to Federal standards. FSIS also ensures that meat and poultry products imported to the United States are produced under standards equivalent to U.S. inspection standards, and facilitates the certification of regulated products.

FSIS' science-based inspection system, known as the Hazard Analysis and Critical Control Point (HACCP) system, places emphasis on the identification, prevention, and control of foodborne hazards. HACCP requirements include meeting sanitation, facility, and operational standards, and other prerequisite programs to control pathogen contamination and produce safe and unadulterated food.

2. The Egg Products Inspection Program is authorized by the Egg Product Inspection Act (EPIA). The program's purpose is to ensure that liquid, frozen and dried egg products are safe, wholesome, and correctly labeled through continuous mandatory inspection of egg processing plants that manufacture these products. FSIS also ensures processed egg products imported to the United States are produced under standards equivalent to U.S. inspection standards, and facilitates the certification of exported regulated products.

During 2016, the agency maintained headquarters offices in the Washington D.C. metropolitan area; 10 district offices; the Policy Development Division in Omaha, Nebraska; laboratories at Athens, Georgia, St. Louis, Missouri, and Anaheim, California; the Financial Processing Center in Des Moines, Iowa; the Human Resources Field Office in Minneapolis, Minnesota; and a nationwide network of inspection personnel in over 6,479 federally regulated establishments in 50 States, Puerto Rico, Guam, and the Virgin Islands. Included are 340 establishments operating under Talmadge-Aiken Cooperative Agreements. A Talmadge-Aiken plant is a Federal plant with State inspection program personnel operating as Federal inspectors under Federal supervisors. Much of the agency's work is conducted in cooperation with Federal, State, and municipal agencies, as well as private industry.

As of September 30, 2016, the agency employment totaled 9,221 permanent full-time employees, including 621 in the Washington, DC area and 8,600 in the field. FSIS employed 9,275 Full Time Equivalents (FTEs as of September 30, 2016). This included other-than-permanent employees in addition to permanent full-time ones.

FSIS funding is broken out into the following categories:

1. Federal Food Safety & Inspection: Expenses associated with operations at all federally inspected meat, poultry and egg product establishments.
2. Public Health Data Communications Infrastructure System (PHDCIS): Expenses associated with providing public health communications and information systems infrastructure and connectivity.
3. International Food Safety & Inspection: Expenses associated with import and export operations and certifications.

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4. State Food Safety & Inspection: Expenses associated with state inspected establishments and state run programs.
5. Codex Alimentarius: Funds US Codex portion of the intergovernmental Codex Alimentarius with the purpose of protecting health of consumers, coordination of food standards, and ensuring fair practices in the food trade.

### Office of Inspector General (OIG) Reports

- Assignment 24601-0001-31, dated May 17, 2012, Application of FSIS Sampling Protocol for Testing Beef Trim for *E. Coli* O157:H7 – the last two remaining recommendations from this audit were closed.
- Assignment 24601-0003-31, dated March 28, 2013, FSIS *E. coli* Testing of Boxed Beef – the last remaining recommendation from this audit was closed.
- Assignment 50601-0006-HY, dated August 6, 2013, FSIS' and AMS' Field-Level Workforce Challenges the last three remaining recommendations from this audit were closed.
- Assignment 24601-0004-21, dated August 12, 2015, FSIS Ground Turkey Inspection and Safety Protocols – four of the eight recommendations were closed.
- Assignment 24601-0001-23, dated August 28, 2015, Implementation of the Public Health Information System for Domestic Inspection – two of the eight recommendations were closed.
- Assignment 50601-0004-31, dated March 30, 2016, USDA's Response to Antibiotic Resistance – four of the six recommendations were closed.

### Government Accountability Office (GAO) Reports

Assignment 361419, May 31, 2013. Agriculture and Food: USDA's Implementation of New State Delegated Meat Inspection Program Addresses Most Key Farm Bill Requirements, but Additional Action Needed. GAO's final report contained four recommendations, and two were closed.

Assignment 361507. October 21, 2014. Food Safety: USDA Needs to Strengthen Its Approach to Protecting Human Health from Pathogens in Poultry Products. GAO's final report contained 4 recommendations directed at FSIS, and four are currently open.

Assignment 361446. November 6, 2014. Food Safety: FDA and USDA Should Strengthen Pesticide Residue Monitoring Programs and Further Disclose Monitoring Limitations. GAO's final report contained one recommendation directed at FSIS, and it is currently open.

Assignment 361560. December 18, 2014. Federal Food Safety Oversight: Additional Actions needed to Improve Planning and Collaboration. GAO's final report contained 1 recommendation directed at FSIS, and it is currently open.

### Ongoing OIG Audits

Assignment 24016-0001-23 – FSIS Follow-up on the 2007 and 2008 Audit Initiatives. OIG is continuing its audit work.

Assignment 24601-0002-21 – FSIS Foreign Equivalency Determinations. OIG is continuing its audit work.

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Assignment 24601-0005-31 – FSIS Controls Over Declaring Allergens on Product Labels. OIG is continuing its audit work.

Assignment 50099-0002-21 – FSIS' Process for Handling Vehicle Misuse Complaints. OIG is continuing its audit work.

Assignment 50601-0004-31 – USDA's Response to Antibiotic Resistance. OIG is continuing its audit work.

Assignment 50601-0014-AT – Implementation of Suspension and Debarment Tools in the USDA. OIG is continuing its audit work.

Assignment 50701-0001-21 – USDA Agency Activities for Agro terrorism Prevention, Detection and Response. OIG is continuing its audit work.

### Ongoing GAO Audits

Assignment 100045. Meat and Poultry Worker Safety. GAO is continuing its audit work.

Assignment 100267. Federal Actions to Monitor and Control Antibiotic Resistance in Food Animals. GAO is continuing its audit work.

Assignment 100294. USDA's Process for Determining the Safety of Imported Beef from Countries with a History of Foot-and-Mouth Disease. GAO is continuing its audit work.

Assignment 100434. Options for Consolidation of the Federal Food Safety System. GAO is continuing its audit work.

Assignment 100542. Seafood Safety. GAO is continuing its audit work.

Assignment 100751. Biological Threat Characterization. GAO is continuing its audit work.

Assignment 100940. USDA's Standards to Control Pathogens in Meat and Poultry. GAO is continuing its audit work.

Food Safety and Inspection Service

Available Funds and Staff Years (SYs)  
(Dollars in thousands)

Item	2015 Actual		2016 Actual		2017 Estimate		2018 President's Budget	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<b>Salaries and Expenses:</b>								
Discretionary Appropriations.....	\$1,016,474	8,938	\$1,014,871	9,160	\$1,012,943	9,045	\$1,038,069	9,109
Subtotal.....	1,016,474	8,938	1,014,871	9,160	1,012,943	9,045	1,038,069	9,109
Transfers In.....	212	-	212	-	-	-	-	-
Transfers Out.....	-	-	-	-	-	-	-	-
Adjusted Appropriation.....	1,016,686	8,938	1,015,083	9,160	1,012,943	9,045	1,038,069	9,109
Balance Available, SOY.....	10,780	-	15,819	-	8,077	-	-	-
Other Adjustments (Net).....	6,333	-	1,066	-	-	-	-	-
Total Available.....	1,033,799	8,938	1,031,968	9,160	1,021,020	9,045	1,038,069	9,109
Lapsing Balances.....	-300	-	-206	-	-	-	-	-
Balance Available, EOY.....	-15,819	-	-8,077	-	-	-	-	-
Subtotal Obligations, FSIS	1,017,680	8,938	1,023,685	9,160	1,021,020	9,045	1,038,069	9,109
<u>Obligations under other USDA appropriations:</u>								
APHIS, Bovine Tuberculosis (TB) Eradication								
awards program.....	200	-	-	-	-	-	-	-
APHIS Blood Sample.....	78	-	99	-	-	-	-	-
APHIS, Imported Cooked Meat.....	-	-	200	-	-	-	-	-
APHIS Mail Room Agreement.....	88	-	-	-	-	-	-	-
APHIS, Antimicrobial Susceptibility testing.....	-	-	78	-	-	-	-	-
OCFO, Salary and benefits for detail.....	16	-	-	-	-	-	-	-
OPACE, Salary and benefits for detail.....	10	-	-	-	-	-	-	-
OPHS, Salary and benefits for detail.....	196	-	272	-	-	-	-	-
Food Nutrition and Consumer Service, and (Partnership)...	508	-	736	-	751	-	766	-
Other USDA.....	165	-	567	-	-	-	-	-
Total, Other USDA.....	1,261	-	1,952	-	751	-	766	-
Total, Agriculture Appropriations.....	1,018,941	8,938	1,025,637	9,160	1,021,771	9,045	1,038,835	9,109
<u>Other Federal Funds:</u>								
FDA, Antimicrobial susceptibility testing.....	400	-	678	-	-	-	-	-
Total, Other Federal.....	400	-	678	-	-	-	-	-
<u>Non-Federal Funds</u>								
Meat, Poultry and Egg Products Inspection.....	180,631	22	246,455	37	245,600	37	201,312	37
Accredited Labs.....	302	-	248	-	248	-	248	-
Trust Funds.....	10,374	76	11,102	78	11,324	78	11,550	78
Total, Non-Federal.....	191,307	98	257,805	115	257,172	115	213,110	115
Total, FSIS.....	1,210,648	9,036	1,284,120	9,275	1,278,943	9,160	1,251,945	9,224

## Food Safety and Inspection Service

### Permanent Positions by Grade and Staff Year Summary

Item	2015 Actual			2016 Actual			2017 Estimate			2018 President's Budget		
	Wash DC	Field	Total	Wash DC	Field	Total	Wash DC	Field	Total	Wash DC	Field	Total
Senior Executive												
Service	20	2	22	20	2	22	20	2	22	20	2	22
SL	3	2	5	3	2	5	3	2	5	3	2	5
GS-15.....	68	29	97	68	29	97	68	29	97	68	29	97
GS-14.....	212	97	309	212	97	309	212	97	309	212	97	309
GS-13.....	189	476	665	189	476	665	189	476	665	189	476	665
GS-12.....	93	1,169	1,262	93	1,169	1,262	93	1,169	1,262	93	1,169	1,262
GS-11.....	28	112	140	28	112	140	28	112	140	28	112	140
GS-10.....	3	490	493	3	490	493	3	490	493	3	488	491
GS-9.....	39	2,154	2,193	39	2,154	2,193	39	2,154	2,193	39	2,138	2,177
GS-8.....	8	985	993	8	985	993	8	985	993	8	985	993
GS-7.....	22	2,894	2,916	22	2,894	2,916	22	2,894	2,916	22	2,894	2,916
GS-6.....	6	25	31	6	25	31	6	25	31	6	25	31
GS-5.....	-	447	447	-	447	447	-	447	447	-	447	447
GS-4.....	4	7	11	4	7	11	4	7	11	4	7	11
GS-3.....	-	-	-	-	-	-	-	-	-	-	-	-
GS-2.....	-	1	1	-	1	1	-	1	1	-	1	1
<b>Total Permanent Positions.....</b>	<b>695</b>	<b>8,890</b>	<b>9,585</b>	<b>695</b>	<b>8,890</b>	<b>9,585</b>	<b>695</b>	<b>8,890</b>	<b>9,585</b>	<b>695</b>	<b>8,872</b>	<b>9,567</b>
Unfilled Positions end-of-year.....	73	461	534	74	290	364	74	520	594	74	347	421
<b>Total Permanent Full-Time Employment, end-of-year.....</b>	<b>622</b>	<b>8,429</b>	<b>9,051</b>	<b>621</b>	<b>8,600</b>	<b>9,221</b>	<b>621</b>	<b>8,370</b>	<b>8,991</b>	<b>621</b>	<b>8,525</b>	<b>9,146</b>
Staff Year Estimate.....	631	8,405	9,036	679	8,596	9,275	677	8,483	9,160	677	8,450	9,224

Food Safety and Inspection Service

SIZE, COMPOSITION AND COST OF MOTOR VEHICLE FLEET

FSIS inspects in 6,479 meat, poultry and egg products plants and import establishments located throughout the United States. A large number of FSIS inspection personnel have responsibilities in multiple plants and work “patrol/relief assignments” traveling from plant to plant on a daily basis. Depending on the inspector’s proximity to given assignments and remote locations, inspectors may be required to travel over larger geographical areas.

All FSIS vehicles are leased from the General Service Administration’s (GSA) fleet except for a vehicle that the agency purchased to use as a mobile Food Safety exhibit. The Food Safety Discovery Zone Vehicle travels throughout the United States visiting, schools, State fairs, and similar local events. FSIS uses the Discovery Zone Vehicle to educate consumers about the risks associated with mishandling food and steps they can take to reduce their risk of foodborne illness. FSIS does not have any discrepancies between the information reported in this exhibit and the information in the Federal Automotive Statistical Tool (FAST).

Size, Composition, and Annual Costs of Operating Vehicle Fleet  
(in thousands of dollars)

Fiscal Year	Number of Vehicles by Type*							Annual Operating Costs (\$ in 000) **	
	Sedans and Station Wagons	Light Trucks, SUVs and Vans		Medium Duty Vehicles	Ambulances	Buses	Heavy Duty Vehicles		Total Number of Vehicles
		4X2	4X4						
FY 2015	2,158	+56	+41	+1	-	-	+1	2,257	11,466
Change	+28	+8	+10	-			-	+46	+610
FY 2016	2,186	+64	+51	+1	-	-	+1	2,303	12,076
Change	+43	+4	+3	-			-	+50	+387
FY 2017	2,229	+68	+54	+1	-		+1	2,353	12,463
Change	+43	+4	+3	-			-	+50	+623
FY 2018	2,272	+72	+57	+1			+1	2,403	13,086

\* Numbers include one vehicle owned by the agency and those leased from GSA.

\*\* Excludes acquisition costs and gains from sale of vehicles as shown in FAST.

## Food Safety and Inspection Service

The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

### Salaries and Expenses:

- For necessary expenses to carry out services authorized by the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act, including not to exceed \$50,000 for representation allowances and for expenses pursuant to section 8 of the Act approved August 3, 1956 (7 U.S.C. 1766), [\$1,014,871,000] \$1,038,069,000; and in addition, \$1,000,000 may be credited to this account from fees collected for the cost of laboratory accreditation as authorized by section 1327 of the Food, Agriculture, Conservation and Trade Act of 1990 (7 U.S.C. 138f): *Provided*, That funds provided for the Public Health Data Communication Infrastructure system shall remain available until expended: *Provided further*, That no fewer than 148 full-time equivalent positions shall be employed during fiscal year [2016] 2018 for purposes dedicated solely to inspections and enforcement related to the Humane Methods of Slaughter Act: *Provided further*, [That the Food Safety and Inspection Service shall continue implementation of section 11016 of Public Law 110–246 as further clarified by the amendments made in section 12106 of Public Law 113–79: *Provided further*,] That this appropriation shall be available pursuant to law (7 U.S.C.2250) for the alteration and repair of buildings and improvements, but the cost of altering any one building during the fiscal year shall not exceed 10 percent of the current replacement value of the building.
- 1 The first change in the language deletes Farm Bill section 11016 of Public Law 110-246 and section 12106 of Public Law 113-79. USDA is requesting Congress to repeal the Farm Bill authorization and transfer this responsibility from the Food Safety and Inspection Service back to the Food and Drug Administration in FY 2018.

Food Safety and Inspection Service

Lead-Off Tabular Statement

Current Law

Budget Estimate, 2018.....	\$1,038,069
2017 Annualized Continuing Resolution.....	1,012,943
Change in Appropriation .....	<u>+25,126</u>

Proposed Legislation

Budget Estimate, Current Law 2018.....	\$1,038,069
Change Due to Proposed Legislation .....	0
Net 2018 Request .....	<u>\$1,038,069</u>

Summary of Increases and Decreases

(Dollars in thousands)

	2015	2016	2017	2018	2018
	Actual	Change	Change	Change	President's
					Budget
Discretionary Appropriations:					
Federal Food Safety & Inspection.....	\$900,641	-\$1,752	-\$1,801	+\$25,280	\$922,367
Public Health Data Communication Infrastructure System (PHDCIS).....	34,580	-	-66	-	34,514
International Food Safety & Inspection.....	16,589	-328	+451	-295	16,417
State Food Safety & Inspection.....	60,905	+585	-630	+114	60,974
Codex Alimentarius.....	3,759	-108	+118	+27	3,796
Total Discretionary Appropriations.....	<u>1,016,474</u>	<u>-1,603</u>	<u>-1,928</u>	<u>25,126</u>	<u>1,038,069</u>

Food Safety and Inspection Service

Project Statement  
Adjusted Appropriation Detail and Staff Years (Sys)  
(Dollars in thousands)

Program	2015 Actual		2016 Actual		2017 Estimate		Inc. or Dec.		2018 President's Budget	
	Staff		Staff		Staff		Staff		Staff	
	Amount	Years	Amount	Years	Amount	Years	Amount	Years	Amount	Years
Discretionary Appropriations:										
Federal Food Safety & Inspection.....	\$900,853	8,790	\$899,101	9,006	\$897,087	8,891	+\$25,280	64	\$922,367	8,955
Public Health Data Communication										
Infrastructure System.....	34,580		34,580		34,514		-	-	34,514	
International Food Safety & Inspection...	16,589	120	16,261	125	16,712	125	-\$295	-	16,417	125
State Food Safety & Inspection.....	60,905	20	61,490	20	60,860	20	+\$114	-	60,974	20
Codex Alimentarius.....	3,759	8	3,651	9	3,769	9	+\$27	-	3,796	9
Subtotal.....	1,016,686	8,938	1,015,083	9,160	1,012,943	9,045	+\$25,126	64	1,038,069	9,109
Supplemental Appropriations:										
Emergency Supp.....	-	-	-	-	-	-	-	-	-	-
Total Adjusted Approp.....	1,016,686	8,938	1,015,083	9,160	1,012,943	9,045	25,126	64	1,038,069	9,109
Rescissions and										
Transfers (Net).....	-212	-	-212	-	-	-	-	-	-	-
Sequestration.....	-	-	-	-	-	-	-	-	-	-
Total Appropriation.....	1,016,474	8,938	1,014,871	9,160	1,012,943	9,045	25,126	64	1,038,069	9,109
Transfers In:										
Cong. Relations.....	212	-	212	-	-	-	-	-	-	-
Subtotal.....	212	-	212	-	-	-	-	-	-	-
Rescission.....	-	-	-	-	-	-	-	-	-	-
Sequestration.....	-	-	-	-	-	-	-	-	-	-
Bal. Available, SOY.....	10,780	-	15,819	-	8,077	-	-8,077	-	-	-
Recoveries.....	6,333	-	1,066	-	-	-	-	-	-	-
Total Available.....	1,033,799	8,938	1,031,968	9,160	1,021,020	9,045	17,049	64	1,038,069	9,109
Lapsing Balances.....	-300	-	-206	-	-	-	-	-	-	-
Bal. Available, EOY.....	-15,819	-	-8,077	-	-	-	-	-	-	-
Total Obligations.....	1,017,680	8,938	1,023,685	9,160	1,021,020	9,045	17,049	64	1,038,069	9,109

Food Safety and Inspection Service

Project Statement  
Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	2015 Actual		2016 Actual		2017 Estimate		Inc. or Dec.		2018 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Federal Food Safety & Inspection.....	\$900,647	8,790	\$890,259	9,006	\$897,087	8,891	\$25,280	64	\$922,367	8,955
Public Health Data Communication Infrastructure System	35,874	-	43,382	-	42,591	-	-8,077	-	34,514	-
International Food Safety & Inspection.....	16,106	120	16,035	125	16,712	125	-295	-	16,417	125
State Food Safety & Inspection.....	61,419	20	70,289	20	60,860	20	114	-	60,974	20
Codex Alimentarius.....	3,634	8	3,720	9	3,769	9	27	-	3,796	9
Total Obligations.....	1,017,680	8,938	1,023,685	9,160	1,021,020	9,045	17,049	64	1,038,069	9,109
Lapsing Balances.....	300	-	206	-	-	-	-	-	-	-
Bal. Available, EOY.....	15,819	-	8,077	-	-	-	-	-	-	-
Total Available.....	1,033,799	8,938	1,031,968	9,160	1,021,020	9,045	17,049	64	1,038,069	9,109
Transfers In:										
Cong. Relations.....	-212	-	-212	-	-	-	-	-	-	-
Subtotal.....	-212	-	-212	-	-	-	-	-	-	-
Transfers Out:										
Working Capital Fund.....	-	-	-	-	-	-	-	-	-	-
Subtotal.....	-	-	-	-	-	-	-	-	-	-
Rescission.....	-	-	-	-	-	-	-	-	-	-
Sequestration.....	-	-	-	-	-	-	-	-	-	-
Bal. Available, SOY.....	-10,780	-	-15,819	-	-8,077	-	8,077	-	-	-
Recoveries, Other (Net)	-6,333	-	-1,066	-	-	-	-	-	-	-
Total Appropriation.....	1,016,474	8,938	1,014,871	9,160	1,012,943	9,045	25,126	64	1,038,069	9,109

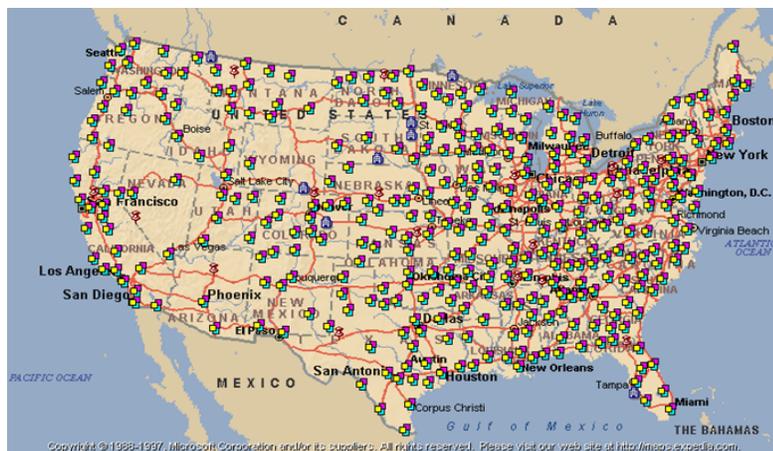
## Food Safety and Inspection Service

### Justification of Increases and Decreases

FSIS provides in-plant inspection of all domestic processing and slaughter establishments preparing meat, poultry, and processed egg products for sale or distribution into commerce, as well as surveillance and investigation of all meat, poultry, and egg product facilities. FSIS inspection program personnel are present for all domestic slaughter operations, inspect each livestock and poultry carcass, and inspect operations at each processing establishment at least once per shift. In addition to in-plant personnel in federally inspected establishments, FSIS employs a number of other field personnel, such as laboratory technicians and investigators. Program investigators conduct surveillance, investigations, and other activities at food warehouses, distribution centers, retail stores, and other businesses operating in commerce that store, handle, distribute, transport, or sell meat, poultry, or processed egg products to the consuming public. FSIS ensures the safety of imported products through a three-part equivalence process which includes (1) analysis of an applicant country's legal and regulatory structure, (2) initial and periodic on site equivalence auditing of the country's food regulatory systems, and (3) continual point-of-entry re-inspection of products received from the exporting country. FSIS also has cooperative agreements with 27 States that operate intrastate meat and poultry inspection programs. FSIS conducts reviews of these State programs to ensure that they are "at least equal to" the Federal program. Additionally, FSIS regulates interstate commerce through cooperative agreements with four States that already have MPI programs that are identical to the Federal program and allows those establishments to ship products across state lines and also, potentially, to export them to foreign countries.

To carry out these Congressional mandates, FSIS:

- Employs 9,275 Full Time Equivalents (FTEs as of September 30, 2016). This includes other-than-permanent employees, in addition to, permanent full-time employees.
- Regulates over 250,000 different meat, poultry, and egg products
- Regulates operations at approximately 6,479 federally regulated establishments.
- Ensures public health requirements are met in establishments that each year slaughter or process
  - 150.7 million head of livestock
  - 9.26 billion poultry carcasses
- Conducts 7.4 million food safety & food defense procedures
- Condemns each year
  - Over 510.5 million pounds of poultry
  - More than 232,740 head of livestock during postmortem (post-slaughter) inspection
- In FY 2016, performed 176,486 Humane Handling (HH) verification procedures



This map represents the geographic distribution of FSIS operated/regulated establishments

FSIS spends approximately 80 percent of its funds on personnel salary and benefits. This is predominantly for inspection personnel in establishments, and other frontline employees such as investigators and laboratory technicians. In addition to this, FSIS spends about 15 percent of its budget on travel for inspectors and investigators, state inspection programs, system infrastructure, and other fixed costs like employee workers compensation payments. The remaining five percent funds operations including: supplies for the workforce (such as aprons,

## Food Safety and Inspection Service

goggles, hardhats, and knives), laboratory supplies, management, policy, shipment of meat/poultry samples for testing, recruitment, and purchase of replacement/new equipment. Additionally, FSIS has to adjust to new or anticipated changes in the workforce, industry, law, technology, and the public, plus the introduction or spread of new diseases/pathogens.

- (1) A net increase of \$25,126,000 and 64 staff years for FSIS (\$1,012,943,000 and 9,160 staff years is available in 2017).

The funding change is requested for the following items:

- (a) An increase of \$15,546,000 for Agency pay costs consisting of (\$4,257,000 to fund annualization of the 2017 pay increase and an increase of \$11,289,000 to fund the 2018 pay increase.

FSIS has a statutory mandate for carcass by carcass slaughter inspection, a once-per-shift per day presence for processing inspection of meat and poultry, and continuous inspection of processed egg products plants. The permanent statutes for the inspection of meat, poultry, and processed egg products result in labor-intensive inspection activities, thereby making salary costs relatively inflexible.

The pay cost is comprised of the following:

1. An increase of \$15,134,000 for the Federal Food Safety and Inspection program.

The increase consists of \$4,144,000 to fund annualization of the 2.1 percent 2017 pay increase and an increase of \$10,990,000 to fund the 1.9 percent 2018 pay increase.

2. An increase of \$271,000 for the International Food Safety and Inspection program.

The increase consists of \$74,000 to fund annualization of the 2.1 percent 2017 pay increase and an increase of \$197,000 to fund the 1.9 percent 2018 pay increase.

3. An increase \$114,000 for State Food Safety and Inspection program.

The increase consists of \$31,000 to fund annualization of the 2.1percent 2017 pay increase and an increase of \$83,000 to fund the 1.9 percent 2018 pay increase.

4. An increase \$27,000 for the Codex Alimentarius program.

The increase consists of \$7,000 to fund annualization of the 2.1 percent 2017 pay increase and an increase of \$20,000 to fund the 1.9 percent 2018 pay increase.

- (b) An increase of \$12,126,000 and 82 staff years to restore funding for Federal Food Safety and Inspection Program.

This funding is required to backfill vacant FSIS frontline positions. FSIS spends 80 percent of its funding on salaries and benefits, predominantly for inspection personnel in establishments, and other frontline employees such as investigators and laboratory technicians. In addition to this, FSIS spends about 15 percent of its budget on travel for inspectors and investigators, state inspection programs, and system infrastructure.

Funding will allow FSIS to improve its vacancy rate and allow the agency to accomplish its food safety mission by decreasing the risk of food borne illness. This staffing increase will allow FSIS to perform food safety verification, humane handling inspection, the collection, testing, and verification of microbiological samples and positively impact employee morale and retention. Funding will reduce potential gaps in inspection coverage and maximize production while minimizing potential economic loss to industry.

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- (c) A decrease of \$2,547,000 and 18 staff years for the Siluriformes Inspection Program.

The 2008 and 2014 Farm Bills required USDA's FSIS to establish a new program for federal inspection of certain fish of the order Siluriformes, including catfish, transferring responsibility from the Food and Drug Administration (FDA) upon publication of the FSIS final rule which was published in December 2015.

FSIS began inspecting both domestic and foreign Siluriformes products in FY 2016 according to the Final Rule titled Mandatory Inspection of Fish of the Order Siluriformes and Products Derived from Such Fish (9 CFR Sec 530-561, December 2, 2015). The Final Rule was effective as of March 1, 2016 with a full compliance date of September 1, 2017, following an 18-month transition period.

USDA is including a request to Congress to repeal the Farm Bill authorization and transfer this responsibility from the Food Safety and Inspection Service (FSIS) back to the Food and Drug Administration (FDA).

Food Safety and Inspection Service

Summary of Proposed Legislation

**Inspection Services Budget:**  
(Dollars in thousands)

	2018		
	Current	Program Changes	President's
<u>Discretionary Appropriation:</u>			
Federal Food Safety & Inspection.....	\$922,367	0	\$922,367
Public Health Data Communication Infrastructure System.....	\$34,514		\$34,514
International Food Safety & Inspection.....	16,417	0	16,417
State Food Safety & Inspection.....	60,974	0	60,974
Codex Alimentarius.....	3,796		3,796
Total Available.....	1,038,069	0	1,038,069

**Program:** User Fee

**Proposal:** In FY 2018, FSIS proposes to require establishments and official plants to pay fees to cover the costs of Federal, State and International inspection programs for meat, poultry, and eggs. The collection of a user fee to cover the costs incurred for inspections and related activities for meat, poultry, and eggs that are related to food safety assessments, verification, and sample collection and analysis. The user fee, for an estimated total of \$660 million in FY 2019, would cover costs for all domestic inspection activities and import re-inspection and most of the central operations costs for Federal, State and International inspection programs for meat, poultry, and eggs. These fees will be collected starting in 2019 and used to reduce appropriation needs in future years.

**Rationale:** Industry receives a benefit from USDA inspections of meat, poultry and eggs. A user fee would cover the costs incurred for inspections and related activities. The fee would not cover federal functions such as investigations, enforcement, risk analysis and emergency response. This fee would increase the cost of meat, poultry and eggs for consumers by less than one cent per pound. The measure would allow the Secretary to adjust the terms, conditions, and rates of the fees in order to minimize economic impacts on small or very small establishments and plants.

**Goal:** To cover the full cost of providing inspections and related activities of an establishment and plant.

**Offsets:** There will be no offset in Fiscal Year 2018.

Budget Impact: (Budgeted Items)

	2017	2018	2019	2020	2021
Discretionary Budget Authority	0	0	660,000	660,000	660,000
Discretionary Outlays	0	0	0	660,000	660,000

## Food Safety and Inspection Service

### Geographic Breakdown of Obligations and Staff Years (Dollars in thousands and Staff Years (SYs))

	2015 Actual		2016 Actual		2017 Estimate		2018 President's Budget	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Alabama .....	\$30,469	371	30,573	392	\$30,405	385	31,020	387
Alaska .....	734	7	780	8	775	8	782	8
Arizona .....	2,848	29	3,243	33	3,325	33	3,251	33
Arkansas .....	38,583	454	37,679	470	37,469	468	38,222	471
California .....	56,168	560	55,422	565	57,886	570	58,880	572
Colorado .....	17,646	169	17,996	173	18,186	173	18,506	174
Connecticut .....	1,376	15	1,446	15	1,418	14	1,430	16
Delaware .....	9,711	130	9,873	138	9,818	137	10,069	139
Florida .....	10,437	120	9,393	113	9,340	112	9,759	106
Georgia .....	83,474	719	73,424	704	73,014	691	74,366	701
Hawaii .....	1,916	18	2,069	18	2,058	18	2,074	18
Idaho .....	2,031	22	2,237	24	2,224	23	2,242	23
Illinois .....	29,631	227	28,282	225	28,124	220	28,583	220
Indiana .....	12,920	134	12,917	147	12,845	145	13,120	147
Iowa .....	37,768	404	36,779	403	36,574	398	37,148	404
Kansas .....	17,058	226	17,193	232	17,097	229	17,342	230
Kentucky.....	13,923	179	13,685	188	13,608	186	13,824	186
Louisiana .....	9,538	93	9,516	98	9,436	96	9,716	98
Maine .....	1,098	10	1,362	12	1,354	12	1,366	12
Maryland .....	27,055	167	26,517	166	26,369	164	26,775	164
Massachusetts .....	2,318	26	2,142	26	2,130	26	2,147	26
Michigan .....	7,237	83	8,207	95	8,161	94	8,419	95
Minnesota .....	24,922	270	24,644	270	24,507	267	25,049	269
Mississippi .....	29,785	332	30,051	345	29,843	330	30,403	331
Missouri .....	30,032	331	29,178	335	29,015	331	29,527	333
Montana .....	2,425	19	2,631	22	2,617	22	2,638	22
Nebraska .....	25,337	296	24,670	301	24,532	297	25,074	300
Nevada .....	511	6	510	6	507	6	511	6
New Hampshire .....	778	8	736	9	732	9	738	9
New Jersey .....	7,739	89	8,760	104	8,711	102	9,012	104
New Mexico .....	1,406	16	1,225	14	1,218	14	1,228	14
New York .....	13,105	152	13,282	161	13,202	160	13,526	160
North Carolina .....	41,317	458	40,861	458	40,633	451	41,412	454
North Dakota .....	1,746	13	1,904	14	1,893	14	1,908	14
Ohio .....	13,766	111	14,785	126	14,702	125	14,993	125
Oklahoma .....	7,745	79	7,594	82	7,552	82	7,546	82
Oregon .....	4,295	47	4,229	50	4,205	49	4,239	49
Pennsylvania .....	39,476	406	37,698	401	37,468	396	38,069	401
Rhode Island .....	710	9	842	10	837	10	777	9
South Carolina .....	11,875	125	11,687	127	11,622	127	11,888	127
South Dakota .....	4,608	45	5,058	49	5,030	49	5,004	49
Tennessee .....	14,953	192	14,511	192	14,430	190	14,653	191
Texas .....	55,602	576	56,826	615	56,509	606	57,436	611
Utah .....	5,222	41	5,207	48	5,178	48	5,220	48
Vermont .....	1,863	9	2,019	10	2,008	10	2,024	10
Virginia .....	15,176	177	15,670	181	15,573	179	16,006	181
Washington .....	8,698	100	8,981	109	8,931	108	9,175	109
West Virginia .....	3,264	29	3,730	31	3,709	31	3,739	31
Wisconsin .....	15,532	140	15,326	142	15,240	138	15,535	140
Wyoming .....	383	0	415	0	413	0	416	0
District of Columbia .....	217,840	660	236,142	660	234,828	650	237,537	658
Guam .....	168	1	151	2	150	2	85	2
N. Mariana Islands.....	42	0	60	0	60	0	60	0
Puerto Rico .....	3,320	37	3,454	40	3,435	39	3,482	39
Virgin Islands .....	100	1	115	1	114	1	115	1
Obligations.....	1,017,680	8,938	1,023,685	9,160	1,021,020	9,045	1,038,069	9,109
Lapsing Balances.....	300	-	206	-	-	-	-	-
Bal. Available, EOY.....	15,819	-	8,077	-	-	-	-	-
<b>Total, Available.....</b>	<b>1,033,799</b>	<b>8,938</b>	<b>1,031,968</b>	<b>9,160</b>	<b>1,021,020</b>	<b>9,045</b>	<b>1,038,069</b>	<b>9,109</b>

Food Safety and Inspection Service

Classification by Objects  
(Dollars in thousands)

	2015	2016	2017	2018
	<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>President's Budget</u>
<b>Personnel Compensation:</b>				
Washington D.C.....	\$80,979	\$78,999	\$78,879	\$80,166
Field.....	507,219	500,459	499,171	516,267
11 Total personnel compensation.....	588,198	579,458	578,050	596,433
12 Personal benefits.....	218,095	220,729	220,262	227,253
13.0 Benefits for former personnel.....	980	1,312	1,312	1,312
Total, personnel comp. and benefits.....	807,273	801,499	799,624	824,998
<b>Other Objects:</b>				
21.0 Travel and transportation of persons.....	37,428	38,651	38,651	37,693
22.0 Transportation of things.....	3,190	3,126	3,126	3,126
23.1 Rental payments to GSA.....	10,291	10,085	10,058	10,058
23.2 Rental payments to others.....	8	3	3	3
23.3 Communications, utilities, and misc. charges.....	10,474	13,495	13,184	10,157
24.0 Printing and reproduction.....	1,032	811	811	811
25.1 Advisory and assistance services.....	3,347	2,866	2,866	2,866
25.2 Other services from non-Federal sources.....	33,117	39,472	39,019	33,842
25.3 Other purchases of goods and services				
from Federal sources.....	42,055	44,399	44,399	44,236
25.4 Operation and maintenance of facilities.....	1,557	542	542	542
25.7 Operation and maintenance of equipment.....	1,138	1,426	1,426	1,426
26.0 Supplies and materials.....	11,788	11,560	11,561	12,561
31.0 Equipment.....	3,444	4,339	4,339	4,339
32.0 Land and structures.....	-	-	-	-
41.0 Grants.....	50,861	50,626	50,626	50,626
42.0 Insurance claims and indemnities.....	677	776	776	776
43.0 Interest and dividends.....	-	11	11	11
44.0 Refunds.....	-	-2	-2	-2
Total, Other Objects.....	210,407	222,186	221,396	213,071
99.9 Total, new obligations.....	1,017,680	1,023,685	1,021,020	1,038,069
DHS Building Security Payments (included in 25.3).....	\$ 1,146	\$ 1,446	\$ 1,413	\$ 1,413
<b>Position Data:</b>				
Average Salary (dollars), ES Position.....	\$170,429	\$173,156	\$176,792	\$180,151
Average Salary (dollars), GS Position.....	\$64,794	\$65,831	\$67,213	\$68,490
Average Grade, GS Position.....	9.2	9.2	9.2	9.2

Food Safety and Inspection Service

Shared Funding Projects

(Dollars in thousands)

	2015 Actual	2016 Actual	2017 Estimate	2018 President's Budget
<b>Working Capital Fund</b>				
Administration:				
HR Enterprise System Management.....	-	73	73	95
Material Management Service Center.....	3,479	4,069	3,817	3,449
Procurement Operations.....	12	346	17	19
Integrated Procurement Systems.....	231	205	204	218
Mail and Reproduction Management.....	1,002	916	978	861
Subtotal .....	4,724	5,609	5,089	4,642
Communications:				
Creative Media and Broadcast Center.....	200	254	281	411
Correspondence Management:				
Correspondence Management.....	246	301	339	305
Finance and Management:				
Financial Management Services.....	6,058	6,007	4,660	4,669
Internal Control Support Services.....	48	41	101	123
National Finance Center.....	2,610	2,651	2,701	2,442
Subtotal .....	8,716	8,699	7,462	7,234
Information Technology:				
Client Technology Services.....	461	912	3,991	3,715
National Information Technology Center.....	4,960	6,238	5,384	5,920
Telecommunications Services.....	1,076	1,006	2,120	2,227
Subtotal .....	6,497	8,156	11,495	11,862
 Total, Working Capital Fund .....	 20,383	 23,019	 24,666	 24,454
<b>Departmental Shared Cost Programs:</b>				
1890 USDA Initiatives.....	255	281	329	296
Advisory Committee Liaison Services.....	3	3	4	3
Classified National Security Information.....	92	66	68	62
Continuity of Operations Planning.....	194	177	185	167
Emergency Operations Center.....	207	208	205	185
Facility Infrastructure Review and Assessment.....	41	38	39	35
Faith-Based Initiatives & Neighborhood Partnerships.....	35	34	35	32
Hispanic-Serving Institutions National Program.....	168	156	174	156
Honor Awards.....	7	7	7	6
Human Resources Transformation.....	157	136	154	139
Identity & Access Management (HSPD-12).....	620	600	591	532
Intertribal Technical Assistance Network.....	-	-	-	-
Medical Services.....	53	53	57	51
Peoples Garden.....	67	57	58	52
Personnel and Document Security.....	103	83	92	83
Preauthorized Funding.....	348	330	325	292
Retirement Processor Web Application.....	55	52	53	47
TARGET Center.....	128	128	127	114
USDA 1994 Program.....	66	61	68	62
Virtual University.....	182	176	174	157
Total, Departmental Shared Cost Programs .....	2,781	2,646	2,745	2,471

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	2015 Actual	2016 Actual	2017 Estimate	2018 President's Budget
<b>E-Gov:</b>				
Budget Formulation & ExecutionLOB.....	9	7	7	7
Enterprise HR Integration.....	194	174	171	171
E-Training.....	255	229	-	-
Financial Management LOB.....	15	12	8	8
HR Management LOB.....	25	24	24	25
Integrated Acquisition Environment.....	61	118	13	14
IAE - Loans and Grants.....	174	-	-	-
Disaster Assistance Improvement Plan.....	-	-	-	-
E-Rulemaking.....	73	45	46	56
Geospatial LOB.....	-	19	13	13
GovBenefits.....	-	-	-	-
Grants.gov.....	49	-	-	-
<b>Total, E-Gov.....</b>	<b>855</b>	<b>628</b>	<b>282</b>	<b>294</b>
<b>Agency Total.....</b>	<b>24,019</b>	<b>26,293</b>	<b>27,693</b>	<b>27,219</b>

## Food Safety and Inspection Service

### Status of Programs

#### Current Activities:

The Food Safety and Inspection Service (FSIS) is the public health regulatory Agency within USDA responsible for ensuring that domestic and imported meat, poultry, and processed egg products are safe, secure, wholesome, and accurately labeled, as required by the Federal Meat Inspection Act (FMIA), the Poultry Products Inspection Act (PPIA), and the Egg Products Inspection Act (EPIA). FSIS also enforces the Humane Methods of Slaughter Act (HMSA), which requires that all livestock at federally inspected establishments be handled and slaughtered humanely. To carry out these Congressional mandates, FSIS employs 9,275 Full Time Equivalents (FTEs) (9,533 employees). Among these employees are a frontline workforce of 7,970 permanent FTEs (8,158 employees) and 221 other-than-permanent FTEs (312 employees) that work in over 6,479 federally regulated establishments, three FSIS laboratories, 125 import establishments, and 158,252 in-commerce facilities nationwide. In addition, there are 1,084 FTEs (1,063 employees) who support them.

FSIS provides in-plant inspection of all domestic processing and slaughter establishments preparing meat, poultry, and processed egg products for sale or distribution into commerce, as well as surveillance and investigation of all meat, poultry and egg product facilities. FSIS inspection program personnel are present for all domestic slaughter operations, inspect each livestock and poultry carcass, and inspect each processing establishment at least once per shift. In addition to in-plant personnel in federally inspected establishments, FSIS employs a number of other field personnel, such as laboratory technicians and investigators. Program investigators conduct surveillance, investigations, and other activities at food warehouses, distribution centers, retail stores, and other businesses operating in commerce that store, handle, distribute, transport, or sell meat, poultry, or processed egg products to the consuming public. FSIS ensures the safety of imported products through a three-part equivalence process which includes analysis of an applicant country's legal and regulatory structure, initial and periodic on site equivalence auditing of the country's food regulatory systems, and continual point-of-entry re-inspection of products received from the exporting country. FSIS also has cooperative agreements with 27 States that operate intrastate meat and poultry inspection programs. FSIS conducts reviews of these State programs to ensure that they are "at least equal to" the Federal program. Additionally, FSIS has a second program with four States that have inspection programs that are the same as the Federal program. Under this program, State-inspected establishments in the program can ship products in interstate commerce.

*Strategic Plan:* In 2011, FSIS developed a five-year Strategic Plan providing both the Agency and stakeholders with a roadmap on how the Agency intends to effect change over time. The Plan outlines three strategic themes: 1) preventing foodborne illness, 2) understanding and influencing the farm to table continuum, and 3) empowering people and strengthening FSIS infrastructure. The Plan includes eight discrete goals and related strategies under these goals.

#### Agency

- Goal 1:** Ensure that Food Safety Inspection Aligns with Existing and Emerging Risks.
- Goal 2:** Maximize Domestic and International Compliance with Food Safety Policies.
- Goal 3:** Enhance Public Education and Outreach to Improve Food-Handling Practices.
- Goal 4:** Strengthen Collaboration Among Internal and External Stakeholders to Prevent Foodborne Illness.
- Goal 5:** Effectively Use Science to Understand Foodborne Illness and Emerging Trends.
- Goal 6:** Implement Effective Policies to Respond to Existing and Emerging Risks.
- Goal 7:** Empower Employees with the Training, Resources, and Tools to Enable Success in Protecting Public Health.
- Goal 8:** Based on the Defined Agency Business Needs, Develop, Maintain, and Use Innovative Methodologies, Processes, and Tools, including the Public Health Information System (PHIS), to Protect Public Health Efficiently and Effectively and to Support Defined Public Health Needs and Goals.

The 2011-2016 Strategic Plan played a large part in guiding the Agency and helping FSIS reduce illness and improve Food Safety. In the following report, each of the Agency's high-priority activities is referenced to the strategic goals that it supports. FSIS recently completed the FY 2017-2021 Strategic Plan and in preparation for the 2018 FSIS budget request, the Agency utilized the goals included in its new strategic plan to evaluate current and future activities, and innovation for achieving targeted outcomes.

## Food Safety and Inspection Service

### Overview of Accomplishments

**Frontline Inspection:** During FY 2016, FSIS inspection program personnel ensured public health requirements were met in establishments that slaughter or process 150.7 million head of livestock and 9.26 billion poultry carcasses. Inspection program personnel also conducted 7.4 million food safety and food defense procedures to verify that systems at all federally inspected facilities maintained food safety and wholesomeness requirements. During FY 2016, inspection program personnel condemned more than 510.5 million pounds of poultry and more than 232,740 head of livestock during post-mortem (post slaughter) inspection. (Goals 1 & 2)

**Salmonella:** FSIS continued its multipronged approach to combat *Salmonella* in FY 2016. FSIS continued sampling of poultry carcasses, established new pathogen reduction standards for *Salmonella* and *Campylobacter* in comminuted poultry, and chicken parts, and continued sampling raw beef for analysis while also continuing the sampling program for *Salmonella* in pork products to determine the presence and levels of *Salmonella* in five types of processed pork products. FSIS also began publishing aggregate (not individual establishment) category status for chicken parts and comminuted poultry on August 20th, 2016.

**Modernization of Poultry Slaughter Inspection:** By the end of FY 2016, all 25 former Hazard Analysis and Critical Control Point (HACCP), Inspection Models Project (HIMP) establishments and 24 other poultry slaughter establishments had implemented the new system. For establishments operating with New Poultry Inspection System (NPIS) for at least six months in FY 2016, measured slaughter volumes increased from 3.5 percent to 11 percent in the former HIMP and non-HIMP establishments. (Goals 1 & 2)

**Foodborne illness Outbreak Investigation:** FSIS coordinated investigations for 30 foodborne illness clusters representing 1,052 illnesses, 134 hospitalizations, four Hemolytic-Uremic Syndrome (HUS) case, and one death. (Goals 1, 4 & 5)

**Humane Handling:** In FY 2016, the Agency devoted 164 FTEs to the verification and enforcement of humane handling requirements in federally inspected establishments, spending more than 340,357 hours completing these tasks. In total, 176,486 verification procedures were performed.

**FoodKeeper Application:** The FoodKeeper application was launched in April 2015. In FY 2016, an additional 40,000 users downloaded the application, bringing its total downloads to nearly 150,000. FSIS identified, managed and launched updates to the FoodKeeper application to make it tri-lingual (English, Spanish and Portuguese), allowed users to submit suggested items for inclusion in the database, and incorporated recall data in the app.

**New Strategic Plan: Completion of FSIS FY 2017-2021 Strategic Plan:** FSIS recently published its 2017-2021 Strategic Plan which contains three goals, six outcomes, and fifteen objectives that represent the agency's path forward over the next five years.

**Sampling Plans:** FSIS developed its first Five-Year Sampling Plan that outlined a vision for FSIS sampling over the next five years and also released its FY 2016 annual sampling plan. (Goals 1 & 6)

**FSIS Siluriformes Implementation:** In FY 2016 FSIS began inspecting both domestic and foreign Siluriformes products as per the Final Rule titled Mandatory Inspection of Fish of the Order Siluriformes and Products Derived from Such Fish (9 CFR Sec 530-561, December 2, 2015). The Final Rule was effective on March 1, 2016 with a full compliance date of September 1, 2017 following an 18-month transition period. Implementation during this transition period includes identifying establishments and working with them to get grants of inspection, modifying PHIS to accommodate Siluriformes establishments, entering the relevant data into PHIS, creating reports to provide information to FSIS to facilitate implementation, developing and implementing sampling projects for domestic and imported Siluriformes, working with foreign countries on requirements to establish equivalency, and creating and implementing Types of Inspection (TOIs) for imported Siluriformes products.

#### ◆ **Federal Food Safety & Inspection Program**

**Frontline Inspection:** During FY 2016, FSIS inspection program personnel continued to ensure that public health requirements were met in establishments that slaughter or process livestock and poultry carcasses. Inspection

## Food Safety and Inspection Service

program personnel also continued the verification of food safety and defense procedures at all federally inspected facilities to ensure that food safety and wholesomeness requirements were maintained. FSIS inspection program personnel ensured public health requirements were met in establishments that slaughter or process 150.7 million head of livestock and 9.26 billion poultry carcasses. Inspection program personnel also conducted 7.40 million food safety and food defense procedures to verify that systems at all federally inspected facilities maintained food safety and wholesomeness requirements. During FY 2016, inspection program personnel condemned more than 510.5 million pounds of poultry and more than 232,740 head of livestock during post-mortem (post slaughter) inspection. (Goals 1 &2)

**Salmonella:** FSIS continued its multipronged approach to combat *Salmonella* in FY 2016. FSIS developed, published, and is currently implementing performance standards for *Salmonella* and *Campylobacter* on raw comminuted poultry and raw chicken parts. FSIS began publishing broiler and turkey carcass category status for all eligible individual establishments on June 20th, 2016 and has been posting updates monthly since that time. FSIS also began publishing monthly aggregate (not individual establishment) category status for chicken parts and comminuted poultry on August 20th, 2016.

FSIS continues evaluating data to inform sampling plan development for product that has historically been excluded from *Salmonella* verification testing. FSIS expects to begin adding additional establishments and products that were previously excluded from sampling projects FY 2017. The Agency also completed Phase I of the pork sampling project in November 2015 to evaluate *Salmonella* in multiple types of processed pork products, and transitioned to interim pork sampling until Phase II begins in second Quarter of FY 2017. The results are being used to develop a future pork sampling project that will further evaluate role of pork products in causing salmonellosis. Data obtained from Phase I sampling was used to determine what microbiological hazards may be of concern in pork products and informed the sampling design of Phase II, which will serve as a baseline for these pork products. Results from the baseline study will be used to develop prevalence estimates and industry guidance and/or develop performance standards.

**Modernization of Poultry Slaughter Inspection:** For establishments operating at least six months with NPIS in 2016, the number of routine slaughter HACCP tasks was stable for both former HIMP and non-HIMP; however, the number of directed tasks increased 19 times for former non-HIMP and 90 percent for former HIMP establishments. For the larger increase in the former non-HIMP establishments, NPIS provided for more off-line personnel, making the performance of offline tasks in former non-HIMP establishments much more frequent. Other results include the significant increase in sanitation Noncompliance Record (NR) citations and the doubling of Public Health Regulations (PHR) requirements verified in former non-HIMP establishments after NPIS implementation and an increase of more than 67 percent in sample collection in both former non-HIMP and HIMP establishments after NPIS implementation. Measured slaughter volumes increased from 3.5 percent to 11 percent in the former HIMP and non-HIMP establishments that had been operating with NPIS for at least six months in FY 2016, when compared to the volumes in those plants in the first six months of 2015.

**Whole Genome Sequencing Expansion (WGS):** To further improve discrimination between bacterial pathogens, FSIS continues to build capacity for WGS. Data collected from WGS can be used to support investigations, identify anti-microbial resistance (AMR) genes of interest and identify environmental harborage and recurrences of pathogens in FSIS-regulated establishments, which can further support FSIS HACCP inspection verification and decisions regarding enforcement actions. By fully implementing WGS, in the future, FSIS will be able to provide WGS related information, in addition to the routine serotype, Pulse Field Gel Electrophoresis (PFGE), and antimicrobial susceptibility results to establishment owners and operators to further assist them in developing supportable HACCP systems, taking effective corrective actions, and performing adequate reassessments. Since October 2015, the Agency has conducted WGS analysis on approximately 4,000 samples (1941 *Salmonella* including NARMS isolates, 265 STECs, 1,578 *Campylobacter* including NARMS isolates and 216 *Listeria monocytogenes* (*Lm*) and uploaded all results to the National Center for Biotechnology Information (NCBI) database. (Goal 5)

**Training:** FSIS workforce is a cornerstone of public health protection. The workforce training strategy used by FSIS includes providing entry-level training on mission-critical inspection skills to new employees, followed by additional training as policy is updated and for training to reinforce knowledge about how to perform complex

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public health protection duties. FSIS has adopted a regional approach to deliver training closer to the worksite and save travel costs; provide leadership training to ensure effective succession planning; and developed e-learning for targeted skills.

To improve the supervisory employee engagement, FSIS conducted monthly training sessions across the organization on topics such as basic employee relations, time and attendance, performance management, formal and informal complaints processes, disciplinary actions, and safety and health in the field offices, along with continued support of the basic supervisor course as well as supervisory refresher training; the Catalyst Leadership program, as well as webinars on various topics.

During FY 2016, FSIS provided entry level training to 408 new Food Inspectors, and 629 newly promoted Consumer Safety Inspectors. FSIS also provided 146 new Public Health Veterinarians, 64 newly hired Enforcement Investigations Analysis Officers, 78 new Egg Inspectors, and 110 new Thermal Processing Inspectors training. FSIS offered Ready to Eat (RTE)/Shelf Stable training to 96 employees, PHIS Egg Products training to six employees and Imports training to 173 employees. In FY 2016, FSIS added four new courses – Fish Inspection, training 96 employees in Siluriformes slaughter and processing inspection; Import Inspection, training 179 employees to perform inspection of products imported into the US; Import Sanitation Inspection, training 19 new employees to verify sanitation regulations and requirements at Import facilities; and PHIS Export Training – three employees trained in how to conduct their tasks (SPS and Export) using PHIS. In addition to classroom training, FSIS conducted six Fish Inspection webinars, covering Fish further processing and inspection of imported Siluriformes. (Goal 7)

FSIS held a Surveillance, Investigations, and Enforcement Methodology training (SIEM) course. The SIEM training was a two-week course developed from the statutes, Agency policy, and directive-based information. The training covered the Agency Mission and Roles, Agency Records, Regulatory Framework, Statutes, Amenability, Exemptions, Investigator Safety, Liaison, In-Commerce Surveillance, Food Defense Surveillance, Investigations, Interviews, Evidence, Sampling, Photography, Investigative Reports, Case Referral/Disposition, Detentions, Seizures, and Criminal, Civil, and Administrative Enforcement. FSIS also held two advanced SIEM training courses, training 59 experienced Compliance Investigators (CI) in advanced investigation procedure. The advanced SIEM training is a one-week advanced course that covers In-Commerce Surveillance, Investigative Methodology, Investigative Surveillance Sampling, Evidence Collection, Report Writing, Case Referral/Disposition, Recalls, Seizures, Criminal and Civil Enforcement, Mentoring, Investigator Safety, Foodborne Illness Investigations, Controlling *Listeria Monocytogenes* in Retail Delicatessens, Imported Products, Order of Siluriformes, and Grinding Logs. Additionally, FSIS CIs held two safety training courses designed to meet the safety needs of various government regulatory and investigative programs. Training included classroom presentations on Unified Training Principles (UTPs), Conflict Skills, Threat Assessment and Response, Driver Training, Surveillance, Defensive Tactics, Operational Security and Operational Planning. Finally, FSIS CIs held an Interviewing Techniques training course that included classroom presentations, interpersonal communications, rapport, questioning techniques, uncooperative interviewees, interview plans, and elicitation techniques. (Goal 7)

In FY 2016, FSIS developed and deployed a new learning tool, the Inspection Program Personnel (IPP) Help button, an online site especially for In-Plant Personnel that provides performance-related information, practice, and training reinforcement on an as-needed basis. During the IPP Help button's first seven months, it had 226,000 hits, averaging more than 30,000 per month. The implementation of the IPP Help Button, instructional resources, simulations, tutorials, Q&A's, videos, and how-to guides at employees' fingertips to support their work. FSIS also devised an innovative solution to provide the opportunity to view the inspector's work setting in an engaging, highly sensory manner using cutting-edge Virtual Reality (VR) technology. (Goal 7)

**Outreach and Partnerships:** The Small Plant Help Desk Virtual Representative was launched and the Small Plant Help Desk experienced record call volume for the "live Help Desk", due in part to an increased presence at exhibits and conferences. FY 2016 inquires totaled 3,421. For the new rule on catfish, FSIS hosted five public meetings (two informational and three Imports) regarding FSIS Siluriformes fish inspection and what FSIS inspection will look like for stakeholders. On average, attendance for these meetings was 80 participants. FSIS provided extensive outreach to its stakeholders regarding the FSIS Final Rule, "Retail Recordkeeping for Establishments and Retail

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Stores that Grind Raw Beef Products.” FSIS hosted 11 webinars providing outreach to several stakeholder groups in regard to this rule. (Goal 4)

**Small Plant Help Desk:** FSIS provides a significant amount of outreach and technical resources to small and very small plants – both Federal and State Inspected. The Small Plant Help Desk, as required by the 2008 Farm Bill, continues to serve small plant owners and operators with valuable assistance. In FY 2016, FSIS launched the Small Plant Help Desk Virtual Representative and experienced record call volume for the live Help Desk, due in part to an increased presence at exhibits and conferences. (Goal 4)

**Humane Handling:** In April 2016, FSIS returned to the original 12-18 month Humane Handling assessment cycle for active livestock plants, recognizing that a longer cycle permits more flexibility in scheduling plant visits and encourages more thorough District Veterinary Medical Specialists (DVMS) evaluations of a plants humane actions/systematic approach. By the end of FY 2016, almost all active livestock slaughter plants have a current Humane Handling assessment with the exception of those who are inactive and slaughter very infrequently. FSIS set the annual FY 2016 performance plan for 75 percent of active livestock slaughter establishments visited by DVMS to have a systematic approach to humane handling. Of the 763 active slaughter plants with a current Humane Handling assessment over an 18-month cycle, 595 have a systematic approach (78 percent). For FY 2016, the goal for Humane Handling assessments was exceeded and is the highest percentage achieved since this goal was established to encourage voluntary adoption of a systematic approach. At end of FY 2016 and by HACCP size, all 59 large plants with a current Humane Handling assessment have a systematic approach (100 percent). Of the 163 small plants with a current Humane Handling assessment, 148 have a systematic approach (91 percent). Of the 541 very small plants with a current Humane Handling assessment, 388 have a systematic approach (72 percent).

FSIS stationed more than 30 Consumer Safety Inspectors (CSI) in those establishments slaughtering significant numbers of “at risk” animals (primarily bob veal and cull dairy). These CSIs will help to ensure almost 100 percent observations by FSIS in the pens and knock area when these classes of livestock are being slaughtered. FSIS is developing metrics to measure the success of these CSI positions.

FSIS reissued the Notice: Instructions for Writing Poultry Good Commercial Practices Noncompliance Records and Memorandum of Interview Letters (MOI) for Poultry Mistreatment. FSIS will monitor the MOIs written to develop a data bank of issues noted by FSIS inspection personnel as outside Good Commercial Practices. Analyzing these documents will inform FSIS future policies.

FSIS published the final Rule: Requirements for the Disposition of Non-Ambulatory Disabled Veal Calves on 18 July 2016 effective 16 September 2016. FSIS amended its regulations on ante-mortem inspection to remove a provision that permits establishments to set apart and hold for treatment veal calves that are unable to rise from a recumbent position and walk because they are tired or cold. FSIS is currently enforcing the amended regulations that will better ensure humane handling of livestock.

In FY 2016, the FSIS devoted 164 FTEs (92 Public Health Veterinarians (PHVs) and 72 non-veterinarian IPP) to the verification and enforcement of humane handling requirements in federally inspected establishments, spending more than 340,357 hours completing these tasks. In total, 176,486 verification procedures were performed. (Goal 2)

FSIS announced its intent to hold livestock owners, transporters, haulers, and other persons not employed by an official establishment responsible if they commit acts involving inhumane handling of livestock in connection with slaughter when on the premises of an official establishment. In those circumstances the Agency intends to initiate civil or criminal action. FSIS believes these actions will further improve the welfare of livestock handled in connection with slaughter by ensuring that all persons that inhumanely handle livestock in connection with slaughter are held accountable. (Goal 2)

**Emergency Coordination** In FY 2016, FSIS developed and conducted six preparedness and response exercises based on Homeland Security Exercise and Evaluation Program (HSEEP) principles that addressed a range of mission critical issues and potential threats facing the Agency. This effort exceeded the original goal of three exercises. Each exercise led to the creation of an After Action Report/ Improvement Plan that identified critical strengths and areas for improvement, which was monitored to ensure that action items were implemented by

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participating FSIS program areas. The exercises ranged from FSIS' annual human pandemic workshop to a Continuity of Operations Planning (COOP) focused workshop at the Agency's proposed new Emergency Relocation Facility that allowed FSIS leadership to test out their plans for leaving the National Capitol Region during a COOP event. Other table top exercises included a Recall exercise and an illness Outbreak Investigation Exercise that provided FSIS decision makers with the opportunity to explore and test new approaches to challenges based on past outbreak investigations in a realistic environment. All of these exercises and completed improvement plans have resulted in FSIS being better prepared to respond to and recover from a variety of significant incidents while carrying out its critical public health activities. (Goals 7 & 8)

**Trend Analysis for FSIS Incident Management Tracking System:** Trends in significant incidents reported in the FSIS incident management system (FIMS) were tracked to inform Agency policy and preparedness plans. These activities helped to improve data quality and the Agency's ability to track trends earlier and with more accuracy in FIMS. (Goals 1 & 8)

**Natural Disasters:** During FY 2016, FSIS was involved in examining the impact of approximately five disasters ranging from flooding to severe weather warnings. FSIS monitored outages of electricity and water to determine if any Tier 1 in-commerce firms were impacted. FSIS conducted onsite visits or made phone contact with Tier 1 firms (Distributors and Warehouses) to ensure that there was no operational impact and that there were no damaged products in commerce. FSIS entered information in the FSIS Incident Management System (FIMS) as needed. (Goal 1)

**Foodborne Illness Outbreak Investigation:** FSIS coordinated investigations for 30 foodborne illness clusters representing 1,052 illnesses, 134 hospitalizations, four HUS cases, and one death. Eight of the illness clusters led to a recall. Of the 30 investigations, seven were investigations for Shiga toxin-producing *E. coli* (six *E. coli* O157:H7, one *E. coli* O26 and O103), 19 for *Salmonella*, two for *Campylobacter coli and jejuni*, two for *Listeria monocytogenes*. (Goals 1, 4 & 5)

<b>FSIS Foodborne Illness Investigations for FY 2016</b>					
	<b>Investigations</b>	<b>Ill</b>	<b>Hospitalized</b>	<b>Deceased</b>	<b>Resulted in Product Recall</b>
<i>E. Coli</i>	7	132	40	0	4
<i>Salmonella</i>	19	904	87	0	4
<i>Campylobacter</i>	2	9	0	0	0
<i>Listeria</i>	2	7	7	1	0
<b>TOTAL</b>	<b>30</b>	<b>1,052</b>	<b>134</b>	<b>1</b>	<b>8</b>

**Recalls:** FY 2016 saw a decrease from FY 2015 of 42 food recalls, from 157 to 122, (26 beef, 39 poultry, 30 pork, one ovine, two exotic and 24 combination products) but an increase of 37.7 million pounds, for a total of 58 million pounds of meat and poultry products recalled. This increase was mainly the result of FSIS Recall 040-2016 in which the firm Ajinomoto Windsor voluntarily recalled 47.1 million pounds of not-ready-to-eat meat and poultry products potentially adulterated with *Lm*. Ninety-one of the recalls were considered Class I (reasonable probability that eating the food will cause health problems or death), 26 were Class II (remote probability of adverse health consequences from eating the food) and five were Class III (use of the product will not cause adverse health consequences). Eleven of the recalls were directly related to microbiological contamination caused by the presence of *Lm*. Fourteen of the recalls were in response to microbiological contamination caused by the presence of *E. coli* O157:H7. Twenty-one of the recalls were due to extraneous material contamination, two recalls were due to contamination of product by *Salmonella*, and 34 recalls were due to undeclared allergens in the product (compared to 58 during FY 2015). The remaining 40 recalls were in response to undeclared or unapproved substances, mislabeling/misbranding, produced without benefit of inspection, unsanitary conditions. (Goals 1, 2 & 6)

**Consumer Complaint Management System (CCMS):** FSIS uses the CCMS, media reports, CDC PulseNet and SharePoint data and a number of other data sources to conduct surveillance and investigation into potential foodborne hazards associated with FSIS regulated products. Surveillance is the backbone to initiate investigation and support response. In FY 2016, FSIS evaluated 1,054 consumer complaints and 80 illness clusters potentially linked to FSIS-regulated products. One-hundred seventy six (17 percent) of consumer complaints required

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additional investigation with the consumer and producing establishment. Sixty-three investigations resulted in 55 voluntary, four enforcement and four regulatory actions. Consumer complaints reported through CCMS led to two Class I recalls in FY 2016. Thirty-eight complaints reported after a product recall helped to enhance recall effectiveness activities. Evidence obtained in seven of 80 monitored illness clusters suggested involvement of FSIS-products that were subsequently investigated.

***In-Commerce Activities:*** FSIS Carcass Inspectors (CI) conduct investigations, enforcement, and surveillance activities at warehouses, distributors, retail stores, and other businesses operating in commerce that store, handle, distribute, transport, and sell meat, poultry, and processed egg products to the consuming public. In FY 2016, FSIS collected 566 retail ground beef samples for testing for *E. coli* O157:H7 (101 percent of FSIS' target of 560). (Goals 1 & 4)

Also in FY 2016, FSIS CIs conducted 774 investigations in response to alleged violations of the FMIA, PPIA or EPIA; 92.1 percent of which were based on food safety violations. The investigative findings and evidence are documented and used to support criminal or civil prosecutions or other enforcement. In FY 2016, FSIS controlled 3.9 million pounds (3.6 million pounds detained) of meat, poultry and egg products in-commerce to prevent possible injury or illness to the consumer. Additionally, 18,636 surveillance activities were conducted in FY 2016 (versus 15,184 in FY 2015). These surveillance activities focused on examination of food safety and food defense activities in accordance with Agency policy and directives. (Goal 1)

With the FSIS launch of the year-long nationwide pilot project to assess whether retailers were using the recommendations in the "FSIS Best Practices Guideline for Controlling *Listeria Monocytogenes (Lm)* in Retail Delicatessens," FSIS CIs completed 1,299 "Retail Deli Surveys" from January 25, 2016 – September 30, 2016. Of the nearly 500 Retailers "surveyed" in the third Quarter of FY 2016, approximately 59 percent of the Retailers were following all eight of the most important Retail Deli LM controls. (Goal 1)

***Prosecutions and Other Legal Actions:*** In FY 2016, FSIS worked directly with USDA Office of the General Counsel (OGC), USDA Office of Inspector General (OIG), U.S. Attorneys, and other regulatory and enforcement partners to deter illegal slaughter, sale of adulterated and misbranded food, false and fraudulent use of food as inspected and passed, and other violations. FSIS issued 1,028 notices of warning (43 from headquarters and 985 from field offices) to individuals and firms for alleged violations of laws. These outcomes sent a strong message that food safety violations will not be tolerated. (Goal 2)

***Administrative Enforcement:*** In FY 2016, FSIS filed 13 administrative complaints to refuse and/or withdraw Federal inspection services for public health violations (e.g., insanitary conditions, HACCP noncompliance), violations of humane slaughter and handling requirements, convictions of applicants or recipients of Federal inspection services, or intimidation or interference with FSIS personnel; negotiated 16 consent orders/agreements with terms that improved food safety, company ethics, and inspector safety; obtained one default judgment, indefinitely suspending inspection service for humane handling violations, four final decisions and orders indefinitely withdrawing inspection from chronic violators, and one voluntary withdrawal of inspection service. These outcomes sent a strong message that food safety violations will not be tolerated. (Goal 2)

***Civil Enforcement:*** In FY 2016, FSIS led litigation actions to obtain civil injunctions, civil judgments, and enforce civil decrees in four civil cases to stop ongoing violations of FSIS food safety laws; filed two civil complaints and, negotiated two civil consent decrees. (Goal 2)

***Administrative Civil Penalties:*** In FY 2016, FSIS led litigation actions to obtain six administrative stipulation agreements in egg cases, totaling \$6,940 in administrative civil penalties for violations of shell egg temperature requirements and issued 20 warning notices to resolve alleged violations of law. (Goal 2)

***Misconduct Investigations:*** FSIS conducted a total of 211 personnel misconduct investigations that were received through the USDA OIG Whistleblower Hotline as well as other internal and external requests. Complaints were also received from congressional staff, other USDA agencies, and public entities. FSIS completed 30 computer

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forensic investigations resulting from direct observation of inappropriate materials detected by vulnerability detection software and OIG hotline allegations. (Goal 2)

***Litigation and Appeals:*** In FY 2016, FSIS applied program knowledge and expertise to deliver exceptional accomplishments in employment and labor litigation, ensuring that actions and outcomes obtained preserved management action, protected agency interests, and advanced FSIS strategic goals. Specifically, FSIS had over 60 new cases received for this period, including 18 new Union Unfair Labor Practices (ULPs) and arbitration cases, 25 new Equal Employment Opportunity Commission (EEOC) complaints, and 17 Merit Systems Protection Board (MSPB) appeals. Overall, FSIS had a case docket of over 132 EEOC, MSPB and arbitration cases. (Goal 7)

***National Antimicrobial Resistance Monitoring System (NARMS):*** FSIS continues to play a prominent role in the NARMS by testing cecal and Pathogen Reduction (PR) HACCP samples for Advanced Meat Recovery (AMR)/Antibiotic Susceptibility Testing (AST). Cecal content sampling is a critical sampling point that approximates what bacterial strains are present in the farm, prior to the product arriving at a processing plant. FSIS' Eastern Laboratory characterized isolates from cecal samples by conducting serotype, AST, and Pulsed-field Gel Electrophoresis (PFGE) (as applicable) and began to conduct WGS on all cecal isolates of *Salmonella* and *Campylobacter*. Cecal content sampling is a critical sampling point that approximates what bacterial strains are in the farm, prior to the product arriving at a processing plant.

***Chemical residue:*** FSIS published a *Federal Register* notice to clarify its approach within the National Residue Program's (NRP's) Tier 2 exploratory program to test tissue samples collected from livestock and poultry carcasses and detect chemicals with no established tolerances or other regulatory levels. This applies to potentially hazardous chemicals that are not animal drugs or pesticide chemicals with established tolerances. The Agency intends to apply this approach to egg products should these products become subject to chemical testing.

FSIS found that the Agency's residue policies are effectively implemented based upon the low number of residue policy questions answered for FY 2016 (out of approximately 11,700 total incidents in askFSIS, 90 were residue related, 0.8 percent of total incidents) and the general downward trend in the numbers of residue violations detected through FSIS testing over the previous three years (FY 2013 – 1,352, FY 2014 -1,124, and FY 2015 – 792). Final data for FY 2016 are pending but the results to date suggest a continued declining trend. FSIS implemented a pilot project to test the hypothesis that certain pathologies were more likely to result in violative chemical. Through a three year retrospective data analysis, the top one third of conditions likely to yield a positive residue were identified for slaughter classes. Phase I of the project, testing targeted pathologies in four cull cow and four veal establishments was completed in FY 2016. The data analysis has been completed for this phase of the project. Phase II, testing targeted pathologies in four market hog and four cull sow/boar establishments, began April 2016 and completes in late 2016. The data from these pilot projects will be used to assess current instructions contained in FSIS Directive 10,800.1, respond to public health veterinarians' survey responses indicating the need for more specific information when selecting carcasses for residue testing, and to further enhance policy effectiveness. (Goals 1, 5, and 6)

***Sampling Plans:*** FSIS implemented its first Five-Year Sampling Plan that outlined a vision for FSIS sampling over the next five years, expanded on the Agency's annual plans and provided transparency on FSIS' long-range sampling activities for stakeholders. This new Plan communicates FSIS' strategic vision for sampling; providing a more holistic view of the Agency's potential sampling activities and identifying goals for the Agency into the future. Specifically, the Plan lays out a strategy to address current gaps in FSIS sampling, close existing sampling exceptions, describe the Agency's plans to expand sampling into new focus areas, and how FSIS intends to achieve efficiencies. FSIS also continued historical work to publish an annual Agency sampling plan to inform the public of the Agency's efforts related to microbiological, chemical residue, and other sampling programs. The plans review FSIS' microbiological and residue sampling programs in domestic establishments, import establishments, and in-commerce facilities and describes FSIS' overall strategy for directing its sampling resources. (Goals 1 & 6)

In FY 2016, FSIS developed and implemented the following new sampling projects: Siluriformes – microbiological, differentiating between species, and chemical residue; Roaster Swine Sampling – microbiological; and made updates to raw beef bench trim, raw pork, chicken parts, and processed egg sampling projects.

Starting in the second quarter of FY 2016, FSIS began posting Sampling Project Results for microbiological pathogens in FSIS regulated products that are currently sampled through existing sampling projects. Depending on the data available, estimates are either percent positives, volume-weighted percent positives, or prevalence. FSIS provided new results each quarter using the prior 12 months of sampling data. FSIS began publishing estimates for raw beef, raw pork, raw chicken, raw turkey, processed egg products, as well as ready-to-eat products. The microbiological pathogen(s) reported on include *Escherichia coli* (*E. coli*) O157:H7, non-O157 STEC, *Salmonella*, *Campylobacter*, and *Listeria monocytogenes* (*Lm*), but the products included in the estimates will vary.

Since October 1, 2015, FSIS has analyzed 103,055 samples and generated 3,416,332 individual test results on these samples. Additionally, FSIS conducted microbiological characterization of 8,624 bacterial isolates reporting 330,617 separate test results. Characterization includes varying methods depending on the type of isolate such as serotyping, Pulsed-Field Gel Electrophoresis (PFGE), Antimicrobial Susceptibility Testing (AST), and Whole Genome Sequencing (WGS). (Goal 1)

***Siluriformes Fish and Fish Products Inspection/Reinspection Programs:*** FSIS began inspecting both domestic and foreign Siluriformes products in FY 2016 as per to the Final Rule titled Mandatory Inspection of Fish of the Order Siluriformes and Products Derived from Such Fish (9 CFR Sec 530-561, December 2, 2015). The Final Rule was effective as of March 1, 2016 with a full compliance date of September 1, 2017, following an 18-month transition period. Implementation included identifying establishments, and working with them to get grants of inspection, modifying PHIS to accommodate Siluriformes establishments, entering the relevant data into PHIS, creating reports to provide information to facilitate implementation, developing and implementing sampling projects for domestic and imported Siluriformes, and creating and implementing Types of Inspections (TOI)s for imported Siluriformes products.

In FY 2016, FSIS issued 15 farm-raised catfish slaughter establishments and one wild-caught slaughter establishment conditional Grants of Inspection (GOIs) and staffed each of these facilities with a full-time consumer safety inspector per production shift (total of 18 production shifts) by March 1, 2016. FSIS also issued 24 domestic establishments that further process farm-raised catfish with conditional GOIs and began inspections at a minimum once per quarter by trained FSIS inspectors at these establishments beginning March 1, 2016. In addition, in FY 2016, FSIS developed a proposed staffing and inspection protocol was implemented by the second quarter of FY 2017 for domestic establishments that receive, slaughter and or further process wild-caught catfish.

In FY 2016, FSIS collected over 50 samples of Siluriformes fish/fish products at domestic slaughter establishments and performed analytical tests to detect *Salmonella* and a variety of chemical residues and also performed speciation of the fish using a DNA barcoding technique. In July 2016, FSIS announced the recall of catfish products from Haring Catfish in Louisiana due to the detection of crystal violet, a banned dye that has been used in the past as an antifungal agent; this violation was identified through FSIS' testing program. (Goals 1 & 2)

***Food Defense Plans:*** Through preparation of guidance documents and tools, outreach and education to industry to facilitate adoption of effective risk mitigation strategies, and collaboration with industry, FSIS successfully promoted voluntary adoption of food defense plans by at least 85 percent of regulated establishments in FY 2016. FSIS will continue to promote voluntary adoption of food defense practices, monitor establishments that have adopted plans, and ensure the agency increasingly integrates food defense principles, concepts, and practices into daily activities. Further, FSIS will expand on its existing strategies to encourage establishments to integrate food defense practices into their day-to-day operations.

FSIS also performed numerous other activities to support food defense. FSIS launched an updated food defense Webpage on the FSIS Website. FSIS IPP, import inspectors, and compliance investigators performed food defense surveillance and verification activities in accordance with FSIS 5420-series Directives to identify potential vulnerabilities in establishments, in-commerce facilities, or ports-of-entry that increase the risk of intentionally adulterated meat, poultry, or processed egg products. FSIS provided presentations to industry groups on food defense activities and collaboration with Transportation Security Administration (TSA) to develop strategies and best practice deliverables for the transportation industry, which would increase awareness on food defense during the transportation and distribution of meat, poultry, and processed egg products and posted Food Defense Guidelines for Siluriformes Fish Production and Processing to the FSIS Website in March 2016. The guidance is a compilation

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of best practices specifically developed to assist federally-inspected fish facilities. FSIS also posted in March a general food defense plan to assist fish producers and processors in developing a food defense plan. Both were developed in consultation with fish producers, processors, and extension personnel. (Goals 2)

***Food Defense Vulnerability Assessments:*** FSIS conducts vulnerability assessments (VAs) to better prevent and protect against an intentional attack on its regulated products, as directed by HSPD-9. These VAs help to identify food defense countermeasures and mitigation strategies aimed at preventing or reducing the impact of an intentional attack on the food supply. They also help identify research gaps and strengthen communication and collaboration between government and industry partners.

FSIS' outreach and education on these vulnerabilities and countermeasures raised awareness of the importance of protecting the food supply against intentional contamination. In FY 2016, FSIS developed a new VA Framework. The VA Framework evaluates changes in policy, risk, threat, and operations on an annual basis to determine if a VA needs to be conducted or updated and will streamline the VA process for FSIS in the future.

Additionally, FSIS is responsible for detecting, preventing, protecting against, mitigating, responding to, and recovering from intentional adulteration of meat, poultry, and processed egg products. Currently there is no formal process to review and prioritize risk across the entirety of the food and agriculture sector. FSIS therefore initiated a risk characterization project in January 2016. When complete, the Food and Agriculture Sector Risk Characterization will provide an updated assessment of the risks (physical and cyber) associated with selected USDA and FDA regulated commodities. Access to validated data and assessments will facilitate resource allocation to mitigate risk. This effort will be an integral component of FSIS' revised approach to review and conduct vulnerability assessments. (Goal 2)

***Program Evaluations:*** FSIS completed several internal surveys and evaluations during the course of FY 2016 that assisted management with program planning, implementation, improvement and accountability. Completed surveys or evaluations included:

- Evaluation of the HR Hiring Process
- Analysis and Alternative Calculation of FSIS' Certificate Costs
- Comparative Analysis of Inspection Data and Non-Compliance Rates for Potential Enforcement Action of Establishment in New England
- NFC Data Feed Lifecycle Assessment
- Study of Data and Information Quality Practices and Processes
- CRS 2016 Compliance Assistance Review Evaluations (Atlanta, Denver, OOEET, and ODIFP) Surveys
- FSIS 2016 Customer Satisfaction Survey
- FSIS 2016 Laboratories Customer Satisfaction Survey
- OPACE 2016 Communications Survey
- OPHS 2016 Internal Communications Board Survey
- ODIFP Data Access Survey
- OCIO Device Preference Survey
- Alternative Dispute Resolution Exit Survey
- ODIFP Employee Feedback Survey
- New Hire 90 Day Surveys
- OM Employee Advisory Committee Survey
- OM Performance and Management Branch Customer Satisfaction
- PHV Retention and Recruitment Survey
- Inspection Methods Training Survey

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**Audit Recommendations:** In FY 2016, FSIS closed the remaining recommendations from three OIG audits:

- Assignment 24601-0001-31, Application of FSIS Sampling Protocol for Testing Beef Trim for *E. coli* O157:H7
- Assignment 24601-0003-31, FSIS *E. coli* Testing of Boxed Beef
- Assignment 50601-0006-HY, FSIS' and Agricultural Marketing Service (AMS)' Field-Level Workforce Challenges

**USDA Risk Management Framework:** FSIS in collaboration with the USDA Office of the Chief Financial Officer (OCFO) participated in a multi-agency pilot program to implement the revised Office of Management and Budget (OMB) Risk Management Framework. The pilot agencies included the Forest Service, Rural Development, FSIS, the Office of the Chief Information Officer (OCIO) and OIG. FSIS served as the lead for the Program and Compliance Assessment Team, whose purpose was to foster collaboration and coordination between Financial Reporting Assessment Team members and Management Control Officers. FSIS completed and evaluated the proposed Entity Level Checklist (ELC) questionnaire and successfully conducted an integration workshop. This information provided the USDA OCFO with recommendations to streamline the implementation process in FY 2016. (Goals 6 & 7)

**Food Emergency Response Network (FERN):** Through its cooperative agreements with State food emergency response laboratories, FSIS accomplished the following major activities: FSIS continued the targeted surveillance of USDA regulated commodities (e.g. Ready-to-eat and raw meat and poultry products) at retail via FERN Cooperative Agreement Program (CAP) partner labs. Twenty states tested 5,910 samples for chemical compounds (toxins, poisons, and heavy metals) 3,162 microbiology samples, 2,438 chemistry samples, and 310 radiochemistry samples. Tests are on-going for one or more microbial analytes from the following: *B. anthracis*, ricin toxin, *Y. pestis*, toxic chemicals and radioisotopes. The CAP laboratories also participated in a capacity and capability exercise during August 2016 correctly analyzing 630 samples received including sample prep, extraction, and instrument time within one week without the reporting of any false positives or false negative results. The FSIS FERN CAP laboratories also provided laboratory testing in conjunction with a targeted surveillance activity for the National Political Conventions. A total of 805 analyses on the 200 samples were performed. All samples were reported negative and results were uploaded to the FSIS database.

FSIS participated in 17 proficiency testing events this past year. These events tested FERN partner labs' capability to find different analytes within selected food matrices. Over 457 labs from FSIS and FDA participated in these seventeen events and analyzed samples (e.g., fish muscle, ground pork, meat based baby food, ground beef, pork sausage with sage, mashed potatoes, milk, bottled water, chicken nuggets, breaded cooked chicken products, hot dogs, etc.) for the following analytes: *Staph*, enterotoxin, *Salmonella*, *Bacillus anthracis*, *Listeria*, Ricin, Abrin, toxic metals, unknown chemicals, unknown pesticides, Malachite Green, Malathion, toxic chemicals, cyanide and tritium, and a multitude of gamma radionuclides. Further, FERN held its annual Biosecurity Level 3 (BSL-3) Triage Method Proficiency Check Sample demonstration in August 2016.

FSIS participated in three Department of Homeland Security (DHS) functional exercises sponsored by the Integrated Consortium of Laboratory Networks (ICLN). Sixteen FERN labs from FSIS and FDA analyzed 1,903 samples during the Sodium Fluoracetate in Milk Exercise. Thirteen FERN labs analyzed 1,300 samples within three to five days during the Malathion Confidence Building/Competency Testing (CBCT) Exercise. Five labs analyzed 200 samples for gamma emitters during the Northern Lights Nuclear Exercise. Additionally, FSIS members of the ICLN Network Coordinating Group (NCG) participated in five mini tabletop exercises (Communications and ICLN Portal Profile Update, Preparedness Alerts, SITREPs, Incident Specific Data Sharing Agreement, and Methods Combined Registry) to maintain proficiency and readiness in the use of the various tools on the ICLN Portal. FSIS received a total of six Food Defense method submissions this year (TOX1, TOX2, Abrin, *Yersinia pestis*, *Shigella*, and Staphylococcal enterotoxin). A Polymerase Chain Reaction (PCR) method for the detection of Staphylococcal enterotoxin producing organisms was approved and posted to the FERN Methods Repository. Five methods are still undergoing technical review by the Methods Coordination Committee (MCC). (Goals 1, 4 & 5)

**National Advisory Committee on Meat and Poultry Inspection (NACMPI):** FSIS hosted the National Advisory Committee on Meat and Poultry Inspection meeting in March 2016. The Committee finalized reports on FSIS'

involvement with *Lm* at retail and whether or not mandatory label features should be included on products that are not ready to eat, but appear ready to eat. (Goal 4)

***Completion of FSIS FY 2017-2021 Strategic Plan:*** FSIS recently published the FY 2017-2021 Strategic Plan, which builds on prior successes and reflects emerging issues that FSIS faces in ensuring that the food products we regulate are safe to eat. This plan will guide us going forward. FSIS' Vision and Mission, as well as our Core Values Accountable, Collaborative, Empowered, and Solutions-Oriented frame the goals, outcomes, objectives, and measures in this Plan. FSIS held both public and stakeholder meetings, including such agencies as the FDA and CDC, to gather input on key focus areas, issues, and trends in food safety that the Agency should consider in developing the Plan. The Plan contains three goals, six outcomes, and fifteen objectives that represent the agency's path forward over the next five years. Our three goals are: (1) Prevent Foodborne Illness and Protect Public Health; (2) Modernize Inspection Systems, Policies, and the Use of Scientific Approaches; and (3) Achieve Operational Excellence. By using cutting-edge yet practical science, enhanced data capabilities, and our employees' skills and expertise, we will continue to modernize and be more effective in meeting our public health mission

***Establishment-Specific Data Release Strategic Plan:*** FSIS released the Agency's draft Establishment-Specific Data Release Strategic Plan for sharing data on federally inspected meat and poultry establishments with the public for comment through a *Federal Register* Notice on Jan 15, 2015. FSIS provided updates on the Plan to the National Advisory Committee on Meat and Poultry Inspection (NACMPI) in March 2016 and to industry and consumer stakeholders. FSIS reviewed and addressed public comments in a final *Federal Register* Notice and formally released the final plan in July 2016. The final version was published on December 2, 2016.

***Stakeholder Inquiries:*** FSIS reviewed and contributed to approximately 36 draft letters to Congress and other legislators. FSIS also responded to nearly 120 inquiries from Congress, 12 of which resulted in either a conference call or in-person briefing on the Hill; and more than 330 targeted inquiries from media outlets, approximately 14 of which resulted in interviews with food safety officials. FSIS responded to more than 150 incoming letters overall, of which 53 percent were from consumers, individuals in the regulated community, and students. Responses include information about topics such as: Agency activities, regulations, petitions, compliance, and FSIS jurisdiction. (Goal 4)

***Foodborne Illness Attribution Achievements and Inter-Agency Food Safety Analytics Collaboration (IFSAC):*** IFSAC was established in 2011 to enhance the safety of our food safety system. Comprised of three federal agencies the CDC, the FDA, and FSIS the goal of this collaboration is to improve coordination of federal food safety analytic efforts and address cross-cutting priorities for food safety data collection, analysis, and use. Projects and studies aim to identify foods that are important sources of illnesses. The current focus of IFSAC's activities is foodborne illness source attribution, defined as the process of estimating the most common food sources responsible for specific foodborne illnesses. Major IFSAC accomplishments, which support Goals 1, 3, 4, 5, & 8 include:

- In December 2015, the CDC Board of Scientific Counselors Food Safety Modernization Act (FSMA) Working Group agreed to serve as an IFSAC strategic advisory group, in response to feedback received during the IFSAC February 2015 public meeting.
- Completed IFSAC project to assess whether the differences between outbreak and sporadic illnesses are substantial enough to prevent outbreak data from being used to estimate attribution of illnesses to different foods. An article was accepted for publication by Emerging Infectious Diseases (EID) on February 24th, 2016, and nominated for press notice consideration by EID, with a scheduled print release on July 1st, 2016. FSIS communicators worked with CDC and FDA to develop a number of press materials, including a Constituent Update, a Research Brief, a "Talking Points" document, and other associated materials.
- Developed an initial draft of the journal manuscript on the IFSAC harmonized, tri-agency-approved simple food attribution fractions was completed and it is anticipated that the manuscript, as well as an initial draft of the journal manuscript on the completed IFSAC project to develop a new food categorization scheme was completed.
- Utilized IFSAC harmonized simple food attribution fractions to develop new FSIS Illness Indicator for the new FSIS Strategic Plan.
- Completed initial draft of a new IFSAC Strategic Plan.

**FSIS Notices:**

***Salmonella* and *Campylobacter*: (Goals 1, 2, 5 & 6):**

- FSIS announced the availability of and requested comments on the revised guideline to assist poultry establishments in controlling *Salmonella* and *Campylobacter* in raw poultry. The Agency revised its existing guideline to provide updated information for establishments to use to control pathogens in raw poultry products with the goal of reducing human illnesses associated with consuming poultry contaminated with *Salmonella* and *Campylobacter*. The guideline represents the best practice recommendations of FSIS based on scientific and practical considerations. By following this guideline, poultry establishments should be able to produce raw poultry products that have less contamination with pathogens, including *Salmonella* and *Campylobacter*, than would otherwise be the case.
- FSIS provided instructions to IPP at establishments that produce raw pork products, to continue sampling pork products for *Salmonella* as part of the nationwide raw pork products exploratory sampling project (RPPESP).
- On May 11, 2016, FSIS established new pathogen reduction performance standards for *Salmonella* and *Campylobacter* in raw chicken parts and not-ready-to-eat (NRTE) comminuted chicken and turkey products. FSIS also began assessing whether establishments meet the new performance standards, and also began web posting of aggregate data for young chicken and turkey carcasses, comminuted chicken and turkey, and chicken parts in August 2016.
- FSIS implemented the New Neutralizing Buffered Peptone Water to Replace Current Buffered Peptone Water for Poultry Verification Sampling to better minimize any carryover effect of antimicrobial interventions used on carcasses and parts.
- FSIS implemented the Other Raw Chicken Parts Sampling Project to collect raw chicken parts other than legs, breasts, or wings for *Campylobacter* and *Salmonella* analyses. This is a new exploratory sampling project to further understand the risk of foodborne pathogens on chicken parts including livers, giblets, and necks that are not subject to the performance standards cited above.

***E. coli* O157:H7 and STEC: (Goal 1, 2, 5 & 6)**

- FSIS issued and began enforcement of the final rule [Records To Be Kept by Official Establishments and Retail Stores That Grind Raw Beef Products](#) that requires official establishments and retail stores that grind raw beef for sale in commerce to maintain specific information about raw ground beef they produce. This rule improves FSIS's ability to accurately trace the source of foodborne illness outbreaks involving ground beef and to identify the source materials that may be attributable to these outbreaks.
- FSIS began enforcing requirements that establishments meet the new labeling requirements for raw or partially cooked needle or blade tenderized beef products ([Descriptive Designation of Needle- or Blade-Tenderized \(Mechanically Tenderized\) Beef Product \(80 FR 28153\)](#)), as specified in [9 CFR 317.2\(e\)\(3\)](#). FSIS made the regulatory changes so consumers and other end users of the product would cook these tenderized products thoroughly to decrease the risk of foodborne illness.

***Listeria monocytogenes*: (Goal 6)**

- FSIS implemented a year-long pilot project to assess whether retailers are using the recommendations in the *FSIS Best Practices Guidance for Controlling Listeria monocytogenes (Lm) in Retail Delicatessens* (FSIS Retail *Lm* Guideline). As part of the pilot, FSIS has posted quarterly results in the constituent update. The increased acceptance by the retail establishments of the guidance, should decrease the amount of *Lm* contaminated RTE meat and poultry products reaching the consumer, decreasing the number of *Lm* foodborne illnesses contributed to by RTE meat and poultry products.
- FSIS modernized its egg products sampling programs to mirror other RTE testing programs. All domestic and imported pasteurized egg products that FSIS analyzes for *Salmonella* will be co-analyzed for *Lm*. FSIS will continue to collect samples of dried, frozen, and liquid pasteurized egg products under its Egg Monitoring (EM) sampling projects and test them for both *Salmonella* and *Lm*. As part of this modernization effort, FSIS eliminated test no longer needed such as its domestic egg products sampling program (EGGDOM), where it conducted quarterly *Lm* analysis and at the end of shelf-life tests on products with shelf-life claims which is no longer needed.
- FSIS updated establishment profiles in the *Public Health Information System*, by including additional product groups, intended use options, and volume categories in the profiles. Adding these options will help

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decrease the assignment of RTE sampling requests in PHIS for products that are not eligible for sampling. This will allow for improved sample scheduling and more effective use of agency resources.

### ***Siluriformes Inspection: (Goals 1, 2, 5, and 6)***

- FSIS' final regulation, effective March 1, 2016, implements the provisions of the 2008 and 2014 Farm Bills, which amended the FMIA, mandating FSIS inspection of Siluriformes and products derived from these fish. This rule established a transition period to complete implementation of the final rule beginning on March 1, 2016 and continuing until September 1, 2017.

### ***Allergens: (Goals 1 and 6)***

- FSIS issued the Compliance Guideline *Allergens and Ingredients of Public Health Concern: Identification, Prevention and Control, Declaration through Labeling* that will assist establishments in addressing the hazards posed by undeclared allergens in meat and poultry products in response to a sustained increase in the number of recalls of FSIS-regulated product that contained undeclared allergens. The guideline focuses on three basic principles: 1) Identify: 2) Prevent and Control: and 3) Declare: to focus on the proper procedures for processing, handling, storing, and labeling products containing allergenic ingredients.

### ***Trichinella spiralis:***

- FSIS published a supplemental proposed rule to amend the Federal meat inspection regulations to eliminate the requirements for both ready-to-eat (RTE) and not-ready-to-eat (NRTE) pork and pork products to be treated to destroy trichinae (*Trichinella spiralis*) because the regulations are inconsistent with the HACCP regulations, and because these prescriptive regulations are no longer necessary. If this supplemental proposed rule is finalized, FSIS will end its *Trichinella* Approved Laboratory Program (TALP) for the evaluation and approval of non-Federal laboratories that use the pooled sample digestion techniques to analyze samples for the presence of trichinae. FSIS is also proposing to consolidate the regulations on thermally processed, commercially sterile meat and poultry products (i.e., canned food products containing meat or poultry).
- FSIS amended the definition and standard of identity for the "roaster" or "roasting chicken" poultry class to better reflect the characteristics of "roaster" chickens in the market today. "Roasters" or "roasting chickens" are described in terms of the age and ready-to-cook (RTC) carcass weight of the bird. Genetic changes and management techniques have continued to reduce the grow-out period and increased the RTC weight for this poultry class. Therefore, FSIS proposed to amend the "roaster" definition to remove the eight-week minimum age criterion and increase the RTC carcass weight from five pounds to 5.5 pounds.

***Shell Egg Policy Enhancement:*** In continuance of the development and implementation of new policies that enforced ambient refrigeration requirements for shell eggs packed, distributed, and sold to consumers and improving food safety, FSIS Compliance Investigators (CIs) conducted 3,809 shell egg surveillances with 99.4 percent compliance rate in FY 2016. (Goals 1, 4, & 6)

***Lab Methodology Updates:*** FSIS completed extensive work revising and validating the Microbiology Laboratory Guidebooks (MLG) and the Chemistry Laboratory Guidebook methods (CLG). The laboratories updated/revised five and archived seven obsolete MLG chapters and revised and validated nine CLG chapters. This keeps our laboratory methods up to date and ensures FSIS provides excellent lab analysis.

### **◆ *International Food Safety & Inspection Program***

***Customs and Border Protection Coordination:*** In FY 2016, FSIS continued efforts to develop the Partner Government Agency (PGA) Message Set. FSIS now has over 50 Customs brokers in the live environment and continues testing, development, and outreach efforts to stakeholders. All ports of entry are now available to filers of FSIS regulated products that have developed PGA Message Set capabilities in the Automated Commercial Environment (ACE). The PGA Message Set automates the collection of information provided by the importer of record (or its agent) on FSIS form 9540-1, Application for Import Inspection. These data elements are transmitted electronically when the entry is filed with Customs and Border Protection through the ACE and eliminates the need

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for importers of record or agents to submit a paper copy of the FSIS form 9540-1 as well as eliminating FSIS inspection personnel data entry. (Goals 2 & 8)

**Equivalence Determinations:** In FY 2016, FSIS proposed adding three additional countries to the list of countries eligible to export meat and poultry products to the United States.

FSIS reviewed the Republic of Poland (Poland) and Honduras' laws, regulations, and inspection systems and determined that their poultry slaughter inspection system is equivalent to the system FSIS has established under the PPIA and its implementing regulations. Should this proposed rule become final, slaughtered poultry, or parts or other products thereof, processed in certified establishments would be eligible for export to the United States. Honduras advised FSIS that it intends to export only raw poultry products, such as whole carcasses, to the United States. Although Poland and Honduras may be listed in FSIS' regulations as eligible to export poultry products to the United States, the product must also comply with all other applicable requirements of the United States, including those of USDA's Animal and Plant Health Inspection Service (APHIS) before any products can enter the United States.

FSIS amended the Federal meat inspection regulations to add Namibia to the list of countries whose meat inspection systems are equivalent to the system that the United States has established under the FMIA and its implementing regulations. FSIS reviewed Namibia's laws, regulations, and inspection as implemented and has determined that they are equivalent to the FMIA, its implementing regulations, and the U.S. food safety system for meat and meat product. Under this final rule, Namibia will export only boneless (not ground) raw beef products, such as primal cuts, chuck, blade, and beef trimmings, processed in certified Namibian establishments. In total, throughout FY 2016, thirty-nine countries were eligible to export FSIS regulated products to the United States. (Goal 2 & 6)

For countries already approved to import to the U.S

- FSIS reviewed 20 equivalence requests from 17 countries (eleven initial for new products, eight reinstatements, and one individual sanitary measure) and made three reinstatement of equivalence and one individual sanitary measure equivalence determinations.
- FSIS issued clarifications to its procedures for verifying the ongoing equivalence of foreign regulatory food safety inspection systems and the actions to be taken when a foreign country does not maintain equivalence (Directive 9780.1, *Verifying the Ongoing Equivalence of Foreign Food Safety Systems*).
- FSIS overhauled the Self Reporting Tool (SRT) to reduce redundancy, make questions more understandable, and clearly define the equivalence criteria that FSIS uses to evaluate foreign countries' regulatory food safety inspection systems and then deployed the new SRT within PHIS for foreign countries to utilize. Additionally, FSIS developed and issued clear instructions to foreign countries as to how to successfully complete the SRT. (Goals 1, 2, 6, and 8)

**Foreign Equivalence Verification Audits:** In FY 2016, FSIS completed ongoing equivalence verification audits of 14 countries (Brazil, Israel, Uruguay, Northern Ireland, Denmark, Italy, Chile, China, Austria, Canada, Australia, Iceland, Mexico and Nicaragua). Brazil and the Netherlands sought and were granted reinstatement for beef without the need for an onsite audit. (Goals 1, 2, & 4)

**Foreign Outreach:** FSIS hosted 36 foreign government officials from 19 countries during a two-week training course on FSIS' equivalence program and regulatory food safety inspection system. The goal was to help countries understand the equivalence process and provide guidance to countries on how to improve their food safety and to be eligible to import to the U.S. (Goals 1, 2, 6, and 8)

**Audits by Foreign Countries:** In FY 2016, FSIS coordinated seven foreign countries' audits of the U.S. food safety system to verify equivalence of the food safety inspection system for meat and poultry products to the following countries: Brazil, China (two audits), European Union, Korea, and Taiwan (two audits). There were no findings of non-compliances.

**Update of Foreign Audit Policies:** In FY 2016, FSIS completed *FSIS Directive 9780.1, Verifying the Ongoing Equivalence of Foreign Food Safety Systems* and prepared draft *FSIS Directive 9770.1, Determining Initial and*

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Reinstating the Equivalence of Foreign Food Safety Inspection Systems, and *FSIS Directive 9790.1*, Writing An Audit Report of Foreign Food Safety Systems. (Goals 1, 4, & 6)

**Foreign Audit Training:** In FY 2016, FSIS sent a cadre of 11 international auditors to attend the International Organization for Standardization (ISO) 9001:2015 “Lead Auditors” training. The competency-based four-day course provided refresher training on the concepts of the ISO 9001:2015 standard and the principles and practices of leading management systems and process audits in accordance with ISO 19011, "Guidelines on Auditing Management Systems." (Goals 1, 4, & 6)

**Import Re-Inspection Activities:** FSIS re-inspects all meat, poultry, and processed egg products offered for import to the U.S. by eligible foreign countries at U.S. ports of entry. FSIS inspects all shipments presented at ports of entry to ensure proper certification by the foreign country and examines each shipment for general condition and labeling compliance. Additionally, PHIS randomly assigns more targeted re-inspections of approximately 10 percent of the meat and poultry presented, including laboratory sampling to identify microbiological pathogens, drug and chemical residues, and even species. FSIS determines the intervals for each type of re-inspection based on compliance history of the foreign establishment, country, and product volume from previous years. During FY 2016, approximately 4.1 billion pounds of meat and poultry products were presented for re-inspection from the eligible countries that are actively exporting product to the United States, and approximately 22.5 million pounds of processed egg products were presented from Canada. The table below provides the 2016 statistics for meat and poultry products:

<b>Imported Meat and Poultry Product (FSIS Goals 1 &amp; 2)</b>					
FY 2016	Total Product Presented for Routine Reinspection (Pounds) <sub>1</sub>	Product Subjected to Additional TOIs (Pounds) <sub>2</sub>	Total Product Refused Entry (Pounds) <sub>3</sub>	Refused Product Rectified (Pounds) <sub>4</sub>	Total Accepted (Pounds) <sub>5</sub>
<b>TOTAL<sup>6</sup></b>	<b>4,148,378,941</b>	<b>295,695,975</b>	<b>51,068,238</b>	<b>44,495,924</b>	<b>4,141,806,627</b>
<b>Imported Processed Egg Product</b>					
FY 2016	Total Product Presented for Routine Reinspection (Pounds) <sub>1</sub>	Product Subjected to Additional TOIs (Pounds) <sub>2</sub>	Total Product Refused Entry (Pounds) <sub>3</sub>	Refused Product Rectified (Pounds) <sub>4</sub>	Total Accepted (Pounds) <sub>5</sub>
<b>TOTAL<sup>6</sup></b>	<b>22,448,930</b>	<b>5,054,073</b>	<b>1,266,326</b>	<b>1,203,062</b>	<b>22,385,666</b>

<sup>1</sup> Routine re-inspection includes the Certification and Label Verification Types of Inspection (TOIs) as well as verification of product condition and identification of shipping damage.

<sup>2</sup> Type of Inspection (TOI). This column is a subset of the total product presented and identifies the amount of product subjected to more in depth physical or laboratory TOIs in addition to the routine re-inspection TOIs (Certification and Label Verification).

<sup>3</sup> Total product refused entry. The importer of record has options including destruction, re-export if allowed, conversion to animal food with Food and Drug Administration approval, or rectification (see footnote 4).

<sup>4</sup> Initially refused entry but subsequently brought into compliance and accepted. Issues amenable to rectification include labeling and certification, among others.

<sup>5</sup> Total Accepted includes all products that was initially inspected and passed plus product that was initially refused entry but later rectified.

<sup>6</sup> Beginning Third Quarter, FY 2016, data includes Siluriformes fish.

In addition to port-of-entry re-inspection activities, FSIS also collaborates with other agencies to enhance inspection efforts and maintain a presence at the U.S. Customs and the Border Protection’s (CBP), Import Safety Commercial Targeting and Analysis Center (CTAC) and the CBP’s National Targeting Center-Cargo (NTCC), targeting high-risk shipments of imported meat, poultry, and processed egg products. These facilities provide FSIS with access to the CBP’s Automated Targeting System (ATS) used to monitor, filter, and prioritize imported shipments. These facilities also provide FSIS with a mechanism to formally request holds, and exams, and issue other instructions to CBP officers at ports of entry. With access to ATS at these facilities, FSIS is able to identify, target, and stop high risk, ineligible, and potentially ineligible shipments closer to if not prior to the time of entry. FSIS also reviews and processes requests to return U.S. exported products. Since these shipments leave the country and travel to destinations all over the world, FSIS asks numerous questions, requests documents, and extensively reviews all information for each request to identify food defense and food safety concerns in order to determine whether these

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shipments are safe to return to U.S. commerce. FSIS coordinates re-inspection of shipments when necessary to ensure returning products are safe, wholesome, and unadulterated. (Goals 1 & 2)

***Siluriformes Fish and Fish Products Oversight/Reinspection Programs:*** The FSIS Siluriformes rule established criteria for identifying foreign countries and foreign establishments as eligible to continue exporting Siluriformes products during the 18-month transition period including: an attestation that the country has a foundation in law for regulating the safety of Siluriformes products, an attestation that the establishments in the foreign country are in compliance with FDA's seafood HACCP regulations, and a requirement that the country provide to FSIS a listing of eligible establishments. In FY 2016, FSIS received attestations and establishment lists from ten countries; these ten countries and more than 200 establishments in these countries were deemed eligible by FSIS.

In FY 2016, FSIS maintained a presence at CBP's National Targeting Center- Cargo (NTCC) and Commercial Targeting and Analysis Center (CTAC) and monitored imported shipments of Siluriformes fish products based on specific criteria using CBP's Automated Targeting System (ATS). FSIS worked with CBP to see that the criteria were built into queries and automated rules designed to 1) identify and prevent the entry of ineligible Siluriformes product into U.S. commerce; 2) identify and select shipments previously subject to FDA import alert for FSIS reinspection; and 3) select shipments for FSIS reinspection on a random basis.

During FY 2016, forty-six Official Import Establishments (I-Houses) were issued updated or new GOIs for Siluriformes fish; imported shipments of Siluriformes products can be presented at these establishments for reinspection.

Since April 2016, over 366,000 pounds of adulterated or ineligible imported Siluriformes product has been prevented from entering/removed from U.S. commerce. This included, in part, 12 Siluriformes product shipments from ineligible countries and/or establishments representing 94,016 pounds of product. In addition, 39 shipments were selected for FSIS reinspection and of these, three shipments from Vietnam representing over 86,700 pounds of Siluriformes product were determined to be violative for chemical residues including malachite green, enrofloxacin, leucomalachite green nitrofurazone, and/or gentian violet. These shipments were refused entry into the U.S. As a result of these violations, FSIS required subsequent shipments from the same establishments to be held intact by the importer until product was tested by a third party laboratory and evidence of chemical independence was received and reviewed by FSIS. Three shipments were distributed into U.S. commerce without meeting these requirements resulting in the recall of 29,645 pounds. An additional 103,160 pounds were controlled for destruction/re-export. FSIS also rejected four shipments through this process because the importer was not able to support chemical independence from the previous violative shipments resulting in the re-export of 53,460 pounds.

In FY 2016, FSIS developed and implemented a "Hold and Test" procedure for use during the transition period when FSIS sampling determines a Siluriformes product to be adulterated or misbranded. In such cases, FSIS now requires the importer to hold all subsequent shipments of Siluriformes products from the same establishment until; 1) each Siluriformes product in each shipment is sampled and analyzed by an accredited third party laboratory; 2) the importer provides a rationale explaining how each specific shipment is chemically independent from previous violative shipments; and 3) FSIS reviews lab results and supporting rationale and determines admissibility.

In June 2016, FSIS announced a recall of approximately 26,000 pounds of imported frozen Swai fillets products from Vietnam by the importer U.S. Cado Holdings, Inc., of Santa Ana, California. The recalled product was distributed in U.S. commerce without meeting federal requirements; specifically in this case the importer did not follow the Hold and Test procedure. This recall was expanded twice to include another approximately 4,000 pounds of Siluriformes product. (Goals 1 & 2)

***International Food Defense Outreach:*** In support of the interagency Global Food Defense Outreach program, FSIS participated in a scoping mission in Indonesia in January 2016, in advance of a food defense workshop, to identify goals and prioritize the needs for the country on protecting against intentional contamination of the food supply. These activities will aid in the development and enhancement of a food defense program as participants will be guided in the development of a national food defense strategy and action plans for private industry. Through the same Global Food Defense Outreach program, Food Defense Assessment Staff (FDAS) also participated in a food defense workshop in Alexandria, Egypt in July 2016. This workshop was conducted in collaboration with USDA's

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Foreign Agricultural Service, the Federal Bureau of Investigation, and an industry consultant. The two-day workshop, hosted by the University of Alexandria, included representatives from government, academia, and industry. In addition, FSIS presented on food defense to participants of the Meat and Poultry Inspection System Seminar in September 2016. (Goals 2)

***Analysis of Public Health Information System (PHIS) Data for Audits of Food Safety Systems in Foreign Countries:*** In FY 2016, FSIS developed “data packages” for countries to help auditors plan audit trips and prepare audit reports. These data packages provided an analysis of import inspection data from the PHIS data warehouse. In addition, FSIS conducted statistical tests to advise foreign auditors how many establishments to audit in each country. This ultimately improves the safety of imported food products by allocating audit resources efficiently. (Goals 1, 4, & 6)

***Export Verification:*** FSIS announced the establishment of an FSIS and AMS Export Verification (EV) Program. The program is designed to verify establishment’s control of closed-faced sandwiches destined for Canada. Among other things, Canada is requiring that closed-faced sandwiches be produced under a Hazard Analysis and Critical Control Point (HACCP) plan. Closed-faced sandwiches are under the jurisdiction of the Food and Drug Administration (FDA), but FDA does not require that the sandwiches are produced under a HACCP plan. Consequently, FSIS and AMS are establishing this program to assist these U.S. exporters. Under the program, the sandwiches will be produced in establishments that are under FSIS’ voluntary reimbursable inspection service and that are operating under conditions that are as consistent as practical with those under which other post-lethality exposed meat and poultry products are produced. Once the program is implemented, only establishments participating in the program will be able to export closed faced sandwiches to Canada. (Goals 2, 7)

***Electronic Export Application and Certification:*** FSIS amended the meat and poultry inspection regulations to provide for an electronic export application and certification system that will be a component of PHIS. The PHIS Export Component will be available as an alternative to the paper-based export application and certification process. FSIS will charge an application fee to exporters that use the PHIS Export Component to cover the cost of maintaining this voluntary service. FSIS also amended the meat and poultry export regulations to provide flexibility in the requirement for official export inspection marks, devices, and certificates. Those changes are currently in effect. (Goals 2, 7)

### ◆ ***Public Health Data Communication Infrastructure System (PHDCIS)***

FSIS increased connectivity for inspectors in establishments by installing over 400 circuits, deploying over 2,500 MiFi devices and 1,200 Smartphones with hot spots, and upgrading all 3G devices to 4G. FSIS also started transitioning remote locations with FSIS network equipment to managed network services with our telecommunications vendors. This will shift the maintenance and tech refresh requirements of endpoint network equipment at these remote locations to the vendors providing the circuit. (Goals 6, 7, 8)

FSIS with USDA and DHS, deployed DHS’s Continuous Diagnostics and Mitigation security suite to the FSIS network security perimeter to enhance our security posture. The system is currently monitoring over 20,000 devices and additional ones are being added through partnership with our telecommunications vendors to enable monitoring of our remote employee’s IT equipment. (Goals 6, 7, 8)

FSIS significantly increased compliance to 87 percent for technical enforcement of LincPass, USDA’s personal identity verification (PIV) card for multi-factor authentication, in order to comply with Homeland Security Presidential Directive 12 (HSPD-12). (Goals 1, 2, 6, 7, 8)

FSIS upgraded its security perimeter hardware this year to replace legacy equipment and enhance firewall capabilities. FSIS also successfully upgraded over 250 Servers (virtual and physical) to ensure a more secure and stable infrastructure environment. FSIS successfully migrated 74 top-level SharePoint sites and 340 sub-sites to O365 SharePoint 2013. These modernization efforts enabled FSIS to decommission legacy equipment and applications while taking advantage of a cloud offering. It removed security vulnerabilities associated with the legacy systems and provides additional features for users of this service. (Goals 6, 7, 8)

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FSIS migrated 8,348 Agency and State computers and 7,602 users to the USDA Enterprise Active Directory (EAD), a service that authenticates and authorizes all users, computers, and laptops accessing the FSIS and USDA networks and enforces security policies and installs/updates software. This migration will also allow FSIS to take advantage of the Department’s single sign on services. (Goals 6, 7, 8)

◆ **State Food Safety & Inspection Program**

**State Inspection Reviews:** In FY 2016, FSIS continued to support approximately 1,600 State-inspected establishments under the 27 State MPI programs. In FY 2016, FSIS completed annual reviews of each of the 27 State MPI programs. The comprehensive State review process consists of two parts: (1) annual self-assessments and (2) triennial onsite reviews, which are used to determine whether the State MPI program enforces requirements “at least equal to” the Federal requirements. In FY 2016, FSIS completed onsite reviews of nine State MPI programs (Indiana, Kansas, Minnesota, Mississippi, Missouri, North Dakota, South Dakota, Wisconsin, and Wyoming). (Goals 1, 4, & 8)

**Cooperative Interstate Shipment (CIS) Program:** To date, Ohio, Wisconsin, Indiana and North Dakota are officially approved for the CIS program. At the end of FY 2016, Ohio had thirteen operational CIS establishments, Wisconsin had twelve selected establishments, and Indiana had four selected establishments. North Dakota has several State establishments that have indicated an interest but have not formally applied for the CIS program. In FY 2016, North Dakota had its first establishment selected to participate in the CIS program, and has had the initial verification visit performed by the FSIS Select Establishment Coordinator (SEC).

FSIS performed onsite and record reviews of state Cooperative Interstate Shipment Programs, and contracted laboratories. As a result, FSIS broadened their quality assurance programs and analytical testing of meat and poultry products. See Table 1 below for a summary of FSIS visits performed in FY 2016.

The National CIS Coordinator, SEC, and District Manager met in person with the Ohio State Inspection Director and other State Inspection representatives to discuss FSIS findings observed during on site verification visits of select establishments in Ohio. This meeting provided opportunity for direct outreach to the state inspection program and improved communication channels through increased familiarity of involved State and Federal parties.

Table 1. Number of Verification Visits Performed by the SEC in FY 2016 by State and Verification Type.

State	# Outreach Visits	# Initial Visits	# Verification Visits	# Routine Visits	# Total Visits
Indiana	2	2	11	0	15
Ohio	1	3	28	3	35
Wisconsin	11	1	20	1	33
North Dakota	3	1	0	0	4
<b>TOTAL</b>	<b>17</b>	<b>7</b>	<b>59</b>	<b>4</b>	<b>87</b>

(Goals 1, 2, and 4)

**Cooperative Interstate Shipment Brochure:** For FY 2016, FSIS created the CIS brochure. This brochure details the process on how establishments can participate in the CIS program. Five hundred copies of the brochure have been printed, and the brochure is available on the FSIS Website. The CIS brochure will be distributed at the outreach events planned for FY 2017 where State establishments can have face to face communication with FSIS personnel regarding the program.

**Public Health Information System (PHIS) for State MPI Programs:** FSIS continues to work with State MPI program directors to coordinate ongoing development of enhancements of the States’ PHIS State functionality that mirrors the Federal PHIS. Ongoing communications between FSIS and State officials resulted in increased investments to support the refinement of PHIS capabilities (plant profile, domestic, analytics, policy issues, and “at least equal to” criteria) for State MPI programs. (Goals 1, 2, 4, & 8)

PHIS State reports summarize and display information about humane handling, noncompliance, and inspection task reports. In FY 2016, FSIS published two additional PHIS Reports for States, providing the public greater access to the information. In FY 2016 over 10,380 users accessed State PHIS Reports. (Goals 1, 2, & 6)

***Audit of State MPI Laboratory Methodologies:*** In FY 2016, FSIS evaluated laboratory methods by using subject matter experts in Microbiology, Chemistry, and Quality Assurance Divisions to perform desk audits and review State laboratories and State contract laboratory analytical methodologies to determine overall equivalence compared to FSIS' laboratory methods. In addition, FSIS completed onsite reviews of six State MPI program laboratory methods and State contract laboratory methods (Kansas, Minnesota, Mississippi, Missouri, South Dakota, and Wyoming). The laboratory method criteria are articulated in the amendment to the "at least equal to" compliance guidelines. Based on FSIS' review, States are expected to provide corrective action plans in response to specific areas of concern. (Goals 1, 2, 4, 5, 7, & 8)

◆ ***Codex Alimentarius***

The U.S. Codex Office manages the participation of the United States in the work of the Codex Alimentarius Commission and its subsidiary bodies, which operate within the framework of the Joint Food Standards Program established by the Food and Agriculture Organization (FAO) of the United Nations and the World Health Organization (WHO). The Codex Alimentarius Commission is an inter-governmental body with 188 members that sets voluntary international food safety and quality standards that protect the health of consumers and ensure fair practices in the international trade of food. The U.S. Codex Office is administratively attached to FSIS and serves a government-wide interagency clientele, as well as stakeholders in U.S. industry and consumer groups to promote U.S. interests in Codex Alimentarius' international food standards work. (Goal 2)

***Setting Global Standards:*** The Commission adopted in July a number of global food safety and quality standards, including *Guidelines for the Control of Non-typhoidal Salmonella spp. in Beef and Pork Meat*, *Guidelines on the Application of General Principles of Food Hygiene to the Control of Foodborne Parasites*, and an Annex to the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods*. The Commission also adopted *Principles and Guidelines for the Exchange of Information between Importing and Exporting countries to Support the Trade in Food*; Revision of the *Principles and Guidelines for the Exchange of Information in Food Safety Emergency Situations*; and Revision of the *Guidelines for the Exchange of Information between Countries on Rejections of Imported Food*. In addition, the Commission adopted 393 maximum residue limits for 24 pesticides, and 274 provisions for food additives. The U.S. Codex Office prepared draft positions for issues under negotiation at Codex meetings, and presented these positions for stakeholder input at ten public meetings. (Goal 2)

***Committee Responsibilities and Participation:*** The U.S. Codex Office hosted two committee meetings: the Codex Committee on Food Hygiene in Boston, MA, in November, attended by more than 200 delegates from 75 countries and ten international organizations; and the Codex Committee Processed Fruits and Vegetables in Washington, DC, in September, attended by delegates from 27 countries and seven international organizations.

***Outreach:*** The U.S. Codex Office manages an extensive program of outreach to facilitate the exchange of views among delegates to Codex meetings for the purpose of achieving consensus on adopting Codex standards that support U.S. food safety policy objectives. The U.S. Codex Office organized several multi-day outreach events for Codex delegates, including two for Asian countries (Laos in June, India in September), one for Latin American and Caribbean countries (Mexico in March), and a joint Latin America-Africa event in Atlanta, GA, in March. In addition, the U.S. Codex Office hosted a multi-regional capacity-building "partnership" program in Washington in May that featured 23 representatives from 13 countries in Africa, Asia, the Southwest Pacific, and Latin America. (Goal 4)

***Training:*** The U.S. Codex Office organized a workshop in Williamsburg, VA, June 2-3, for 40 U.S. delegates from nine federal agencies to share experiences, refine committee strategies, enhance effective delegation leadership skills, and promote consistent approaches on cross-cutting Codex issues. (Goal 7)

◆ *Cross-Cutting Accomplishments*

**Public Health Information System (PHIS):** FSIS continued to enhance the implementation of the Public Health Inspection System (PHIS). The PHIS strengthens FSIS' operations and policy implementation strategies by providing FSIS inspectors and managers the tools needed to carry out FSIS' food safety mission. In FY 2016, FSIS made the following functionality enhancement of PHIS:

- Release of Import Inspection and Domestic Inspection Enhancements. These enhancements supported Siluriformes Inspections, updates for the New Poultry Inspection System, Alerts/State Self-reporting Tool, and Foreign Country Login, two way communications with Customs and Border Patrol, and Point of Entry Verification.
- FSIS also completed the requirements analysis and design work to modernize the Consumer Complaint Monitoring System (CCMS) and transition the functionality into PHIS.
- FSIS analyzed PHIS inspection and operational data to evaluate the effectiveness of policies. Noncompliance Reports (NR), Public Health Regulations and NR. Findings informed policy development.
- The PHIS was updated to include a slaughter subclass for feral swine in the Animal Disposition Reporting (ADR) section.
- The PHIS poultry animal disposition reporting (ADR) function was upgraded with changes to the Poultry Class Information page and the Poultry Condemnation Certificate, FSIS Form 9061-2.
- The Agency issued instruction for use of the PHIS Dashboard Alerts Widget. The alerts are usually related to targeted lab sampling collections or other follow up activities needed at specific establishments.
- FSIS facilitated establishment access to PHIS by issuing IPP guidance about enrolling establishment management in PHIS and instructing IPP on how to enter the name and contact information of the establishment's designated Establishment Administrator in the establishment's PHIS profile. (Goal 1 & 8)

**PHIS Reports:** Because of PHIS, the Agency is collecting more data about inspection activities than it has in the past, resulting in a greater need for reports summarizing this data. FSIS has expanded the suite of PHIS reports. There are now 183 PHIS reports available to users based on their PHIS role, and there are 22 reports ready to be published. These reports include 104 Federal reports, 65 State reports, four industry reports and ten import reports, containing information about lab sampling, slaughter, inspection tasks, establishment profile, resource management, imports and industry. New versions of existing reports were published 104 times in response to 177 user change requests. From Oct 1, 2015 through September 30, 2016, a total of 128,800 reports were generated by PHIS users. (Goals 1, 2, & 6)

**Public Health Information System (PHIS) Alerts:** PHIS alerts are data driven generated food safety messages that in-plant personnel (IPP) receive via email and/or system notification allowing IPP to proactively react to food safety information. These alerts ensure that IPP are receiving the correct sampling tasks, ensure that food defense activities are being tracked, as well as notifying IPP that an establishment has an elevated Public Health Regulation (PHR) non-compliance rate that is close to the threshold for Public Health Risk Assessment (PHRE)/Food Safety Assessment (FSA) scheduling. Six PHIS alerts were successfully deployed, including the PHR Early Warning Alert. (Goals 1, 7, & 8)

**Data Quality:** The objective of the FSIS Data Quality Initiative is to improve the accuracy and efficiency of reporting and data driven decisions. The data quality team is documenting and analyzing known and new data issues, implementing data corrections, and providing detailed recommendations for preventing future issues. In FY 2016, FSIS closed 231 issues and coordinated the execution of 19 rounds of data corrections. FSIS wrote 21 detailed recommendations for PHIS enhancements and system fixes for long term data quality improvement, which included requirements for seven suggestions for PHIS fixes and enhancements. (Goals 1, 7, & 8)

**Policy Enhancement:** In FY 2016, FSIS revised the surveillance directive (FSIS Directive 8010.1) to inform investigators of changes to in-commerce business types and tiers and clarify responsibilities during shell egg surveillance. FSIS Directive 8010.3, the evidence directive, (in clearance) has been revised to provide policy for the use of smartphones to collect photographic evidence and update investigative sampling procedures under PHIS.

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FSIS Directive 8010.5, the case referral directive, (in clearance) has been revised to clarify roles and responsibilities during administrative, civil, and criminal case referrals and incorporate shell egg and Siluriformes fish violation referral instructions. (Goals 1, 4, & 6)

**AssuranceNet/In-commerce System:** The Agency concluded a thorough review in late FY 2015 of several years of surveillance findings, investigations, enforcement actions, and product control actions at in-commerce firms along with a review of recent policy initiatives intended to reduce foodborne illnesses attributable to product handling at in-commerce businesses. As the result of that review, FSIS has tightened its surveillance efforts. These important changes in surveillance prioritization and revised Performance Measures will improve the effectiveness of our In-Commerce surveillance activities and improve public health.

In FY 2016, FSIS prioritized and implemented performance improvements for ANet/ICS, including:

- FSIS-wide implementation of Phase eight enhancements to ANet/ICS, including roll out of new tools for hearings and appeals, reporting, and batch printing; performance improvements for Firm Information, Surveillance, Product Control, Investigation, Enforcement, Administrative Enforcement Reporting (AER), and Misconduct Investigations;
- Developed a Gap Analysis assessment, and requirements gathering to enhance the system for FSIS-wide users, and to ensure system functionality and data integrity;
- Tested and deployed several functionality patches to address existing issues and applied updates to the training site. (Goals 1, 2, 4, & 8)

**Occupational Safety and Health:** FSIS continued its collaboration with Occupational Safety and Health Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH).

FSIS supported the implementation of the NPIS by coordinating with the Department of Labor (DOL), and the Occupational Safety and Health Administration (OSHA). FSIS collaborated with OSHA to develop an FSIS policy (Directive 4791.16, Annual Attestation on Work-Related Condition for Establishments Operating under the NPIS) which is geared towards privately owned establishments who maintain programs to monitor and document any work-related conditions of establishment workers.

The final injury rate for FY 2016 was 5.88 percent which continued overall the decrease from 2012 of injuries and illnesses for FSIS employees. Significant progress was made this year in advancing guidance and policy to protect agency employees. Directive 4791.1, Basic Safety and Health Program was updated. (Goal 7)

<u>Year</u>	<u>Occupational Injury Rate</u>
2012	6.45
2013	6.42
2014	5.50
2015	5.50
2016	5.88

**Workers' Compensation:** FSIS achieved a ten percent increase in cost savings of \$1.7 million by returning 78 percent of injured employees to work through the Alternative Duty Program, Work Hardening Program and job offers. The agency also saved a total of \$58,753 in prescription and medical cost through the use of the pharmacy program. Achieved the goal of timely filing of wage-loss claims (form CA-7) of 91 percent, which is an increase from FY 2015. (Goal 7)

**Smart Space and Physical Security:** OAS Property Management Branch reduced the FY 2015 square foot baseline of 470,784 by 20 percent in FY 2016 to 376,855, exceeding the five percent reduction goal. One-hundred percent of ePACS (electronic Physical Access Controls) is completed and/or identified at our mission critical sites. With the completion of the Western Lab move in FY 2016, all electronic systems have been identified and installed. In addition, 100 percent of all credentialing requests are being responded to within 48 hours. (Goal 7)

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**Small business contracting:** In FY 2016, FSIS continued to exceed all small business targets for socially disadvantaged contractors, including veteran/ woman-owned/HUBZone (Historically Underutilized Business Zones). In FY 2016 FSIS awarded 62 percent, up from 53 percent in 2015, of its contracts to small businesses. (Goal 7)

<b>Socio-Economic Category</b>	<b>% of Awards</b>
Small Business:	62.5%
Small Disadvantaged Business:	38.3%
Woman-Owned Business:	25.8%
HUBZone (Historically Underutilized Business Zone) Small Business:	14.9%
Service-Disabled Veteran Owned Small Business:	5.81%
Strategic Source Achievements:	37.6%
CPARS (Contractor Performance Assessment Reporting System) Completion:	51.8%

Companies can have more than one subcategory rating, and all subcategory awards are counted under “Small Business” umbrella.

**Recruit and Retain Performing Employees:** In the area of Recruitment and Staffing, FSIS continuously worked towards improving the hiring model and on improving onboarding operations in order to keep the field adequately staffed. Additionally, FSIS began using Virtual Reality devices to aid in recruiting events and to help new hires understand what their job entails in order to reduce new hire turn over.

**FSIS leadership and Development Training:** During FY 2016, FSIS provided Individual Development Plan (IDP, competency-based supervisory, management and leadership learning opportunities to 2,751 FSIS employees which is over 25 percent of the agency’s managers, supervisors and non-supervisory employees. Training included classroom, webinars and program tailored. Additionally, ten supervisor newsletters were designed for and distributed to 1,256 FSIS managers and supervisors to educate, inform and reinforce learning associated with corresponding webinar instruction. FSIS was recognized with a USDA Cultural Transformation Award for its employee development initiatives. The Agency was acknowledged for its training, development, competency gap-closing endeavors, and preparing employees for career advancement and/or as future leaders. The award recognized the Agency’s culture of continuous learning through investments in education, training, and other developmental opportunities that help employees build mission-critical competencies. Specific programs that contributed to the recognition included the FSIS Catalyst Leadership Development Program; FSIS Escalade Leadership Development Program; FSIS Experienced Supervisor Training Program; FSIS Mentoring Program; and the FSIS New Supervisor Training Program. (Goal 7)

**Civil Rights:** During FY 2016, FSIS identified the following mandatory Equal Employment Opportunity and Civil Rights (EEO/CR) training for FSIS employees: (1) Diversity and Inclusion: From Inclusion to High Performance; (2) Understanding and Preventing Workplace Harassment; and (3) Preventing and Correcting Sexual Harassment in the Federal Workplace (supervisor and managers only). FSIS employees were issued the training in an Agency Notice on May 16, 2016, and the training modules were made available to employees through their AgLearn profile “To-Do-Lists”. For field employees without computer access, hard copies of the FY 2016 mandatory training were mailed to them. On July 21, 2016, 100 percent of Senior Executive Service (SES) employees completed an additional Diversity and Inclusion Training, delivered by Franklin Covey, which fulfilled the Office of Human Resource Management mandatory Diversity and Inclusion training requirement for SES employees. As a result of these training efforts, 97 percent of non-supervisory employees completed two hours of EEO/CR training and 95 percent of supervisory employees completed three hours of EEO/CR training.

In FY 2016, the Agency processed 198 informal complaints and resolved 129 for a counseling resolution rate of 65 percent. One hundred percent of all informal cases were counseled timely, and 98 percent were offered the opportunity to participate in Alternative Dispute Resolution (ADR). Analysis of complaint data for the past five years showed a reduction in formal complaints filed from 81 cases in 2011 to 68 cases in 2016. The Agency’s ADR resolution rate was 77 percent, which is considerably higher than USDA’s resolution rate of 44.3 percent and the Federal government rate of 43.5 percent. Feedback obtained from the surveys indicated the Agency’s ADR process is effective in resolving conflict and reducing the formal complaint inventory. Eight-one percent of the participants

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reported being 'satisfied' or 'very satisfied' with the ADR program and 89 percent would recommend the ADR program to a colleague.

FSIS completed nine Title VI compliance reviews of FSIS' Federally Assisted State Meat and Poultry Inspection (MPI) Programs and four Title VII compliance reviews during FY 2016; all 100 percent of these reviews were completed and reports were issued by the end of the fiscal year. FSIS completed four internal Civil Rights Impact Analyses (CRIAs) of proposed rules and reorganizations. All four of these CRIAs were completed timely and in accordance with Departmental regulations. In addition to the CRIAs, the Agency reviewed 137 Agency policies for Civil Rights impacts determinations. In keeping with various reporting requirements, the Agency timely and accurately completed EEOC's FY 2015 MD-715, 462, and No FEAR Act reports, as well as the FY 2016 Agency Head Accomplishment Report.

In keeping with the Agency's Federal Employee Viewpoint Survey (FEVS)/Cultural Transformation/employee engagement initiative, the Agency planned, coordinated, and executed a 2016 Diversity Training Conference. The Conference was held during the week of August 23-25, 2016. In total, 225 employees from field and headquarters participated in the Conference, with approximately 150 being from the field and 75 being from headquarters. Participants attended numerous workshops that were presented by FSIS, OASCR, and OGC subject matter experts as well as trainings presented by Franklin Covey. Approximately, 95 percent of the attendees indicated that the Conference met or exceeded their expectations.

FSIS collaborated with the Department in the planning and coordination of all Special Emphasis Program (SEP) events sponsored by the Departmental Administration. In addition, to educate the workforce the Agency conducted Disability Month in October and American Indian/Alaska Native month in November. These events were held in the Atlanta and Philadelphia District offices. The SEP also led extensive outreach efforts, collaborating with multiple affinity groups and employee organizations and attending eleven national training conferences to attract a talented and diverse applicant pool.

During FY 2016, the Agency re-issued its Limited English Proficiency (LEP) policy statement and updated its LEP Plan for Conducted Programs to ensure equal access to services provided by FSIS for persons with LEP. The Agency also issued LEP Implementation Strategy to its Assisted Programs in order to provide 27 State MPI Programs with guidance for ensuring the same equal access to their limited English proficient customers. In addition, the Agency also secured interpretation and translation contracts to ensure the Agency maintains adequate language access services for its customers. (Goal 7)

***FSIS Web Presence:*** Digital communication enables FSIS to quickly reach its large and diverse audiences. FSIS delivers news, food defense information, policy issuances, compliance guidance, import/export requirements, workforce training materials and more via its main Website, [www.fsis.usda.gov](http://www.fsis.usda.gov). Documents distributed through the FSIS public Website represent the efforts of all FSIS program areas and support all eight strategic goals.

The public Website is a window on Agency activities and for citizens, a means of participating in the policy development process. For many, the site is their only direct contact with FSIS and is a primary source of their food safety information. In FY 2016, FSIS reached a total of 91.6 million cumulative page views for [www.fsis.usda.gov](http://www.fsis.usda.gov); the site averaged 7.6 million page views per month during the year. Website traffic is in large part media driven and therefore subject to fluctuation, but this figure exceeded the year's target for page views. Because it is easy for customers using mobile devices (tablets, smartphones) to view the site, FSIS continues to see more mobile device use. Approximately 31 percent of more than 13 million visits to the site during the year were made using a mobile device, an increase from about 17 percent the previous year.

Over time, the Website has become the primary distribution channel for items that were formerly print publications. Notable examples include laboratory methods (the Microbiology Laboratory Guidebook and Chemistry Laboratory Guidebook) and the Meat, Poultry, and Egg Products Inspection Directory. Online availability not only increases the reach and accessibility of this information, it greatly reduces the time required to produce and disseminate document revisions.

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A digital subscription service notifies subscribers of additions and changes to the FSIS public Website. In FY 2016, 222,553 subscribers with a total of 1.4 million subscriptions received more than 44 million e-mail bulletins regarding their chosen topics. This direct notification is particularly popular and effective in publicizing recall information. The digital subscription service (provided by GovDelivery) continues to show growth in the number of subscribers (+23.74 percent over last year) and total subscriptions (+16.17 percent over last year). More Website page views are attributed to this source than to any other referrer. Currently, 45 topics are listed for subscription. Many are related to import/export issues; important changes to country requirements can be conveyed to the subscriber base in a matter of hours.

### ***AskFSIS system:***

In FY 2015, FSIS supported effective policy implementation by FSIS through the askFSIS system. The askFSIS database provides online answers to technical, inspection-related questions and is designed to serve the business audience in much the same way that Ask Karen is designed to serve consumers. In FY 2016, askFSIS customers visited the site 624,175 times, conducted 229,637 searches, and viewed 666,500 published answers. The askFSIS customers also submitted 24,181 questions for individual answers. The table below provides information regarding askFSIS correspondents who submitted questions. Roughly, 51 percent of the 24,181 questions submitted to askFSIS came from FSIS Employees. (Goal 6)

**Information Requests by Correspondence FY 2016**

<b>Customer Type</b>	<b># of Questions Submitted</b>	<b>Percentage of total (#)</b>
Establishment – Large	1,851	7.7%
Establishment – Other	234	1.0%
Establishment – Small	3,489	14.4%
Establishment – Very Small	1,688	7.0%
FSIS – District Office	155	0.6%
FSIS – EIAO	567	2.3%
FSIS – Frontline Supervisors	413	1.7%
FSIS – Other	914	3.8%
FSIS at Establishment – Large	3,106	12.8%
FSIS at Establishment – Other	474	2.0%
FSIS at Establishment – Small	4,139	17.1%
FSIS at Establishment – Very Small	2,474	10.2%
Government Agency Other than FSIS	765	3.2%
Industry – Other	1,934	8.0%
No Value	776	3.2%
Other	1,195	4.9%
<b>TOTAL</b>	<b>24,181</b>	

***Tribal Relations:*** FSIS participated in Tribal consultation with two federally recognized Tribes: the Choctaw Nation and Quapaw tribe.

FSIS held two Tribal consultations with the Quapaw tribe of Oklahoma. These meetings were held in February and June 2016. On September 1, 2016 the Quapaw tribe formally announced plans to build a 25,000-square-foot meat processing plant to be built on tribal trust land in Miami, Oklahoma. According to Quapaw Chairman John Berrey, the plant will be the country’s first tribe-owned operation of its kind and is expected to employ six people upon opening, with the capacity to create up to 20 jobs. The Quapaw tribe broke ground for construction in mid-September and expects to be fully operational in 2017.

The Choctaw Nation of Oklahoma requested tribal consultation with FSIS in July 2016 to discuss their plan for building a slaughter and processing plant in Durant, Oklahoma. The discussion also included the feasibility for the tribe to have an equivalent inspection program similar to the State Inspection Program. (Goal 4)

***Employee Outreach:*** In FY 2016, FSIS launched “i-Impact,” an Agency initiative to help each employee understand how his or her work supports the Agency’s mission and strategic goals. FSIS finalized an i-Impact

workbook and video, and rolled out in-person workshops to employees across the country. FSIS also designed and launched Webpages focused on internal communications drawn from the i-Impact initiative. FSIS communicated with employees through two entries in the FSIS Administrator's Blog; nine Town Hall meetings including three for all employees (one of which was an interactive Town Hall and included the capability for employees to submit questions via live chat, ten of which were answered in that manner), and six for field employees. Additionally, FSIS published weekly issues of the Wednesday Newsline and the monthly newsletter, *The Beacon*. In *The Beacon*, focusing on the topic of accountability, senior leadership discussed the Federal Employee Viewpoint Survey, the Annual Performance Plan, and the Strategic Plan. Also, the newsletter featured twelve different employees in its Faces of Food Safety column, which highlights different employees from across FSIS in various mission areas. Finally, *The Beacon* took an employee centric-focus by publishing many articles on employee well-being including Snapshots from the Field, kudos from the field, and employee welfare articles.

In FY 2016, FSIS provided Freedom of Information Act (FOIA) training to approximately 200 field employees in nine district and/or field offices. These sessions focused on helping employees understand their role in the FOIA process, and how they contribute to the public's understanding of FSIS' mission and the work the Agency does to protect public health. The FSIS FOIA office plans to conduct more of these sessions during FY 2016, with a goal of training 50 percent of the Agency's program areas and district offices.

The Agency intranet site, InsideFSIS, facilitates and encourages communication among FSIS employees. The site fosters a sense of community among FSIS' geographically dispersed workforce. InsideFSIS is supported by a large network of content contributors, representative of all FSIS programs and offices. Featured content is updated regularly to highlight items of importance to all employees. In FY 2016, the site was used effectively to inform employees of educational and training opportunities available to them and to facilitate completion of required in-service training. InsideFSIS was also a communications channel for the i-Impact initiative, which emphasizes the influence each individual has on the FSIS mission.

#### ◆ *Education and Outreach Accomplishments*

##### *Seasonal and Opportunistic Outreach:*

FSIS conducts outreach strategically to promote food safety related to seasons, holidays, and the implementation of new regulations. Below is a summary of the campaigns used to promote food safety during FY 2016.

Thanksgiving: This outreach campaign generated more than 32.4 million total impressions of safe food handling guidance. This is more than the total impressions of all the seasonal outreach conducted during the previous fiscal year.

- *Congressional Outreach:* In total, nine members of Congress shared FSIS content on social media, which resulted in the message reaching more than 124,000 constituents.
- *Meat & Poultry Hotline:* On Thanksgiving Day alone, the hotline received 1,023 total calls. In addition, more than 44,600 answers were viewed on Ask Karen, an 80 percent increase from the previous year.
- *Consumer Blogs:* Nine food safety blogs were developed for Thanksgiving. The blogs resulted in 73,413 impressions and 707 engaged users on Twitter and 41,028 impressions and 1,077 engagements on Facebook.
- *Social Media Outreach:* FSIS conducted an extensive outreach campaign promoting consumer food safety practices related to Thanksgiving during the month of November. In total, Facebook posts had 945,942 impressions and 52,790 engaged users and tweets had 705,658 impressions and 12,005 engagements.
- *At-Risk Outreach:* Thanksgiving outreach included outreach to the Massachusetts Partnership for Food Safety, American Society of Clinical Oncology (Cancer.Net), and the American Diabetes Association. Partner sites shared and posted press releases and infographics resulting in a reach to more than 100,000 at-risk individuals.
- *Media Outreach:* The Thanksgiving media tour included three national feeder interviews with NBC News, FOX News, and Univision (Spanish). The tour also included other national news outlets, such as CBS Radio and ABC Radio. There also were 29 total English and Spanish satellite radio interviews. The media tour resulted in interviews aired more than 200 times, for a total of 234 airings when combined with the 29 radio interviews. The Thanksgiving media tour generated more than 26.9 million impressions.
- *Todo Cuenta:* From November 19th through November 26th, FSIS ran the first flight of its *Todo Cuenta* radio public service announcement campaign. The Thanksgiving portion of the campaign netted 3.5 million impressions from Hispanic radio markets nationwide.

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Winter Holiday: This outreach generated more than 23 million total impressions of safe food handling guidance.

- *Meat & Poultry Hotline:* From December 1, 2015 – January 5, 2016, the USDA Meat and Poultry Hotline received 9,048 total inquires, answered 253 chats, and responded to 1,178 emails. In Ask Karen, 241,402 answers were viewed.
- *Consumer Blogs:* There were nine Winter Holidays blogs that resulted in 63,440 impressions and 581 engaged users on Twitter and 119,315 impressions and 5,212 engagements on Facebook.
- *Social Media Outreach:* In total, the Winter Holidays Facebook posts had 601,512 impressions and 34,572 engaged users and tweets had 652,328 impressions and 8,129 engagements.
- *At-Risk Outreach:* Winter Holidays outreach included outreach to AIDS.gov, Cancer.net, the Massachusetts' Partnership for Food Safety Education, and the National Institute of Senior Centers. Through blogs, infographics and social media posts, these partners reach more than 870,000 at-risk individuals.
- *Media Outreach:* The Winter campaign received placements in 17 news and radio outlets, resulting in nearly two million impressions

Super Bowl: This outreach generated more than 2.1 million total impressions of safe food handling guidance.

- *Consumer Blogs:* There were two consumer blogs posted for the Super Bowl, resulting in 13,887 impressions on Facebook and 23,299 impressions on Twitter. On FoodSafety.gov, the blogs generated 1,327 page views.
- *Social Media Outreach:* In total, the Winter Holidays Facebook and Twitter outreach efforts totaled over 378,559 impressions, with Facebook holding 160,636 impressions and Twitter generating 217,923 impressions.
- *Media Outreach:* The Super Bowl Media Tour included 26 interviews which included interviews with CBS Radio Studios and News Channel eight in Washington, D.C. and a food demo on Baltimore Fox 45. The interviews resulted in a reach of 1.7 million consumers. Other news outlets picked up the press release, resulting in a reach of more than 111,000 additional consumers.

Spring: This outreach generated more than 13 million impressions of safe food handling guidance total.

- *Consumer Blogs:* There were seven food safety blogs developed for the spring campaign. The blogs resulted in 147,968 impressions and engaged users on Twitter and 51,458 impressions and 1,894 engagements on Facebook.
- *Social Media Outreach:* Between Feb. 15 and May 8, the spring outreach Facebook posts had 1.5 million impressions and 66,033 engaged users and Twitter had 2.4 million impressions and 28,529 engagements.
- *At-Risk Outreach:* The spring campaign included outreach to American Public Health Association (APHA), American College of Obstetricians and Gynecologists, Text4Baby, American College of Obstetricians and Gynecologists, Cancer.Net, and National Institute of Senior Centers. Through blogs, infographics, workshops and Twitter chats, these outreach efforts resulted in more than 100,000 impressions.
- *Media Outreach:* The spring media outreach included interviews with Fox 45 News in Baltimore and 32 other radio, print, online and Hispanic news outlets. Combined, these news outlets resulted in more than 2.2 million impressions.

Summer: This outreach generated more than 18.2 million total impressions of safe food handling guidance.

- *Consumer Blogs:* Nine summer outreach blogs were posted to FoodSafety.gov resulting in 120,882 impressions and 922 engaged users on Twitter and 50,538 impressions and 1,179 engagements on Facebook.
- *Social Media Outreach:* Between May 11 and Aug. 15, the summer outreach Facebook posts had 50,538 impressions and 1179 engaged users and tweets had 2.4 million impressions and 11,361 engagements.
- *Media Outreach:* The spring media tour included 42 TV interviews in English and 16 TV interviews in Spanish which collectively had 264 airings on 207 stations in 133 markets, resulting in a reach of 8.7 million viewers. There were 88 radio interviews that aired on 2,666 affiliate stations in 21 markets, reaching 6.2 million consumers. Eleven print and online publications picked up the press release and published stories, including Fox Baltimore, Nebraska City News Press and The Times & Democrat.

Back-to-School:

- *Media Outreach:* The Back-to-School media tour included eight TV interviews in English and eight TV in Spanish which collectively had 264 airings on 78 stations in 56 markets, resulting in a reach of 2.8 million viewers.

**Mechanically Tenderized Beef:** When the requirement for meat producers to label mechanically tenderized beef (MTB) went into effect in May 2016, FSIS conducted an extensive outreach campaign to educate consumers about what MTB is, why it now has a label, and that they just have to follow our guidance for whole cuts of meat to cook it properly. This outreach generated more than 133 million impressions of safe food handling guidance in total.

***Ad Council/Food Safe Families Campaign:***

In FY 2016, the *Food Safe Families* campaign received more than \$17.2 million in donated media, achieved 520,261 detections (a detection is similar to a placement it is an opportunity an individual has to 'detect' our material) and 340 million impressions. Cumulatively, this Ad Council contract has generated more than \$144 million in donations, 3.7 million detections and more than nine billion impressions since its launch in June 2011.

Public Service Announcements (PSAs) created in partnership with the Ad Council and 20th Century Fox using the characters from Alvin and the Chipmunks were launched in early October 2015. The partnership included PSAs on billboards, bus shelters, and television channels across the nation. A multimedia news release promoting the partnership appeared on 238 Websites with a potential audience of 171 million. The webpage for the release of this information was viewed 13,150 times and children's activity pages launched on FoodSafety.gov promoting the partnership were viewed 20,688 times.

This fiscal year, FSIS also developed a teacher-to-parent activation kit in coordination with the Ad Council and Scholastic using the *Alvin and the Chipmunks* characters and FSIS' mascot 'Thermy.' These educational materials included a lesson plan for teachers to conduct with second through fourth grade students, and take home materials for students to review with parents after their lesson. The materials were available digitally this spring and were sent physically to teachers in the fall. The impact of the in-school marketing program with Scholastic is not represented in traditional reporting; however, nearly 400,000 food safety themed emails were sent to parents and teachers, which delivered over 500,000 banner impressions and received 1.2 million content integration impressions from Scholastic's homepage, Facebook page and e-newsletters. In addition, 50,000 bundled family magazines were delivered via school classrooms this fall, with an estimated reach of 1.5 million families and 50,000 teachers.

***FoodSafety.gov***

In FY 2016, FSIS continued to work closely with those at FoodSafety.gov to promote content on the *Food Safe Families* campaign site. Total sessions, unique users, and page views were consistent with statistics from FY 2015. Four of the top five pages on the Website are directly related to USDA and *Food Safe Families* campaign messaging. This continued high traffic to FoodSafety.gov can be attributed to a variety of factors, including the robust outreach FSIS conducted during FY 2016. More than 40 blogs from FSIS were posted on FoodSafety.gov during this fiscal year. Additionally, blogs were heavily promoted on social media this year. These efforts routinely directed readers to find more information on specific FoodSafety.gov pages, contributing to the year's strong traffic.

***Food Safety Discovery Zone***

The USDA Food Safety Discovery Zone (FSDZ) continues to be a highly visible part of FSIS' public health mission and the agency's public health outreach to consumers. In FY 2016, the FSDZ traveled to Washington D.C. and 10 states, including, Maryland, Oklahoma, Texas, New Mexico, Colorado, Michigan, Ohio, Illinois, Indiana and Massachusetts. The FSDZ reached more than 1.5 million consumers and exhibited at 22 events. Of the 10 states visited, four were states that the FSDZ has never visited. They include: Oklahoma, Colorado, New Mexico, and Michigan. Events focused on at-risk demographics and underserved communities, including Native American, children under five years of age, rural families, Hispanic families, and older adults. Since its launch in 2010 the FSDZ has reached approximately 7.1 million consumers.

***FoodKeeper Application***

The FoodKeeper application was launched in April 2015. It provides consumers with information about safe handling and storage times for hundreds of food items. (Goals 1, 3, 4, 5, 7 & 8)

Keeping the FoodKeeper application updated and engaging for existing and potential users is a high priority for the Agency. OPACE identified, managed and launched updates to the FoodKeeper application to make it tri-lingual (English, Spanish and Portuguese), provided users a new way to suggest items for inclusion in the database, and launched updates that let users switch between imperial and metric measurements (i.e. °C or °F).

## Food Safety and Inspection Service

The FoodKeeper app remains a relevant, useful and effective way to educate consumers about proper food storage and its relationship to safe food handling behaviors. This year, an additional 40,000 users downloaded the application, bringing its total installs to nearly 150,000. The app was mentioned in the Washington Post and the USA.gov blog called it “one of the government’s best mobile applications.” In July, *Food and Nutrition Magazine* gave the FoodKeeper app their “5-star Registered Dietician & Nutritionist (RDN) Score” in an article reviewing food related applications. The FoodKeeper was the only government application in the story to earn five out of five stars.

**USDA Meat and Poultry Hotline:** Hotline staff responded to more than 51,000 consumer inquiries via the Meat and Poultry Hotline during FY 2016. Meat and Poultry Hotline staff also responded to 14,681 email inquiries during FY 2016.

**Ask Karen:** “Ask Karen” is FSIS’ food safety virtual-representative and the most popular feature on the FSIS Website. The “Ask Karen” database received 11,116 email questions and 2.4 million answers were viewed in FY 2016. The “Ask Karen” chat feature allows consumers to chat on-line with a Hotline food safety specialist. The “Ask Karen” chat received 2,636 chat requests in FY 2016.

**Social Media:** During FY 2016, FSIS used a variety of social media networks to promote recalls and communicate about proper safe food handling practices. FSIS used Twitter, Facebook, YouTube, blogs, and webinars for routine outreach. FSIS used pop culture topics like Ghostbusters, #PokémonGo, and the 2016 Rio Olympics to promote food safety messages to audiences engaged in discussion about those trending topics.

- Twitter and Facebook:
  - The @USDAFoodSafety Twitter account and the FoodSafety.gov Facebook account continued to see growth throughout the year due to the ongoing strategy of using non-traditional topics to communicate food safety messages. Twitter engagements saw a 15 percent increase from last year, meeting this year’s goal and Facebook engagements increased by ten percent. FSIS has seen considerable success in Twitter followers, reaching a new total of 787,072 followers which surpassed the target of 780,000 set for FY 2016.
  - In an effort to educate the Hispanic community about safe food handling, FSIS began posting some messages in Spanish on Facebook. This year, the FSIS Spanish language Twitter account achieved a total of 185,444 impressions and 591 new followers.
  - In FY 2016, FSIS has continued to see high engagement with traditional food safety messages accompanied by infographics. For example, FSIS shared the *Food Safety Before, During and After a Power Outage* infographic for severe weather multiple times on FSIS social media platforms, generating more than 1.6 million impressions on Twitter.
  - FSIS incorporated food safety messaging into trending topics, such as The Golden Globes, Black History Month, Valentine’s Day, Mardi Gras, National Pizza Day, National Puppy Day, The Oscars, NCAA Basketball, Star Wars Day, National Burger Day, Ghostbusters and Hispanic Heritage Month.
  - Overall, FSIS’ Twitter messages received more than 12.5 million impressions and 160,567 engagements this year (an engagement is the number of unique people who have clicked, liked, commented on or shared posts). FSIS’ Facebook messages posted to the FoodSafety.gov Facebook page received more than eight million impressions and 388,162 engagements.
- YouTube:
  - Content published on the FSIS public site is also used on social media sites, feeds, and the government partner portal site [www.FoodSafety.gov](http://www.FoodSafety.gov). These efforts support consumer education activities that improve home food-handling practices and prevent foodborne illness. Like USDA, FSIS is also making greater use of YouTube as a hosting platform. FSIS’ YouTube channel has received more than 1.30 million views since its inception. Some training videos are also being hosted, per request of the Civil Rights Staff, to facilitate access by State inspectors. Several videos on inspection-related topics such as sampling and HACCP validation, that support policy issuances, are also available. (Goal 3)

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**Constituent Outreach Publications:** FSIS communicated with constituents, including consumers and industry and consumer representatives, via weekly issues of *Constituent Update*, a publication featuring articles pertaining to Agency policy and regulatory changes, FSIS sampling program results, international trade issues, and other FSIS-related issues of importance to industry and consumer groups. It is distributed through the FSIS Website and currently has nearly 26,000 subscribers. To further assist small businesses, FSIS published monthly issues of *Small Plant News*. FSIS also published news releases that offered food safety tips to assist consumers during power outages; natural disasters, such as wildfires, tornados, and floods; holidays, such as Independence Day, Memorial Day, Thanksgiving Day and New Year's Day; and special occasions, such as going back to school, National Food Safety Education Month, and the Super Bowl.

**Partnerships:** In FY 2016, FSIS continued and established partnerships with numerous national organizations representing at-risk groups. These organizations include the National Public Health Information Coalition, the Network for Public Health Law, National Association for County and City Health Officials, the Congressional Black Caucus Foundation, the Congressional Hispanic Caucus Institute, Association for Public Health Laboratories, the Greater Washington Urban League, Hispanicize, and the Council for State and Territorial Epidemiologists.

FSIS worked with these partners to disseminate targeted products, host events and webinars, develop infographics and training programs, and collaborate on social media. Below are some of the highlights related to FSIS partnership and outreach to at-risk groups:

- FSIS worked closely with the American Public Health Association to secure an article in their publication, *Public Health Newswire*, which featured a Q&A with the Deputy Under Secretary to answer questions about his career at FSIS, the Agency's public health mission, and food safety during warmer weather. The placement received approximately 25,000 impressions. *Public Health Newswire* is the number one source for public health news, according to Google. The previous month's Q&A featured CDC Director Thomas Frieden. FSIS also participated in the APHA's National Public Health Week Twitter chat which received a total of 42,265 impressions.
- FSIS partnered with the National Council on Aging to develop and implement a 'Food Safety 101' information session for senior centers throughout the country. Ten training sessions were administered, including one by Deputy Under Secretary Al Almanza in College Station, Texas.
- In August 2016, FSIS partnered with Meals on Wheels America (MOW) to present on "Food Safety Resources and News You Can Use" at the Annual MOW Conference and Expo in Nashville, Tennessee. MOW is an organization that supports more than 5,000 community-based senior nutrition programs across the country.
- FSIS shared the "Food Safety for People with Cancer" infographic, the "Baby Boomers and Food Safety" infographic, the "Food Safety for Pregnant Women" infographic, the "Food Safety for Children Under 5" infographic, and food safety information for people with diabetes and hepatitis, several times on FSIS social media platforms, generating more than 526,500 impressions on Twitter and Facebook.
- The Hispanic outreach team partnered with National Council of La Raza for the *Comprando Rico y Sano* program. This program educates *promotores de salud* (health promoters) about public health topics. Two 'train-the-trainer' sessions were held with this program in Georgia and California to educate 40 health promoters on food safety basics; these health promoters then brought these messages to their communities. FSIS also partnered with the New Mexico State University Cooperative Extension Offices on outreach events targeted to the Hispanic community for use in educational demonstrations, public health events and community events held by the more than 30 state-wide offices.

## Food Safety and Inspection Service

### Summary of Budget and Performance

**Mission:** The Food Safety and Inspection Service (FSIS), a public health regulatory agency within the U.S. Department of Agriculture (USDA), is responsible for ensuring that the commercial supply of meat, poultry, and processed egg products moving in domestic commerce or exported to other countries is safe, secure, wholesome, and correctly labeled and packaged. Legislative mandates provide FSIS with the authority to conduct its public health mission.

The Department will be revising the USDA Strategic Plan later in the spring and expects to release it with the FY 2019 President's Budget

**Section 1: Selected Accomplishments toward Achievement of the Key Outcomes** (Provided below is a summary-level compilation of Agency accomplishments in FY 2016. Accomplishments more specifically targeting *corporate performance measures* are found later in the document.)

#### **FSIS 2011-2016 Strategic Plan Goal 1: Ensure that Food Safety Inspection Aligns with Existing and Emerging Risks**

FSIS ensures food safety through the authorities of the Federal Meat Inspection Act (FMIA, P.L. 90-492), the Poultry Product Inspection Act (PPIA, P.L. 90-492), and the Humane Methods of Slaughter Act (P.L. 85-765). The Agency takes actions when establishments operate in violation of these laws.

In support of these laws, Goal 1 focused on effectively minimizing existing and emerging food safety hazards and targeting resources to existing and emerging risks. Surveillance, investigation, and enforcement are additional tools used to protect public health and respond to food safety hazards and risks associated with FSIS-regulated products. This goal was measured through one of the Agency's corporate performance measures, the All-Illness measure, among other FSIS measures.

- **All Illness:** FSIS set illness reduction targets with the goal of achieving ambitious Healthy People 2020 targets. FSIS did not achieve the FY 2016 All Illness or *Salmonella* targets; however, FSIS did meet its *E. coli* O157:H7 and *Listeria monocytogenes* targets. The FY 2016 targets were not met, in part, because the methodology utilized included only 3 years of data, so large outbreaks coming into (FSIS-regulated chicken products) or falling out of (very large outbreak in FDA-regulated shell eggs) the dataset highly influenced the attribution estimates. FSIS adopted in FY 2017 a new, harmonized attribution methodology and fractions, developed by the Interagency Food Safety Analytics Collaboration (IFSAC), to annually estimate and monitor illnesses associated with FSIS-regulated products.
- **Pathogen Reduction Performance Standard:** FSIS finalized and began testing whether establishments meet new pathogen reduction performance standards for chicken parts, which represent 80 percent of the chicken available for purchase in the United States. FSIS also finalized and began testing to assess whether establishments meet new pathogen reduction performance standards for comminuted chicken and turkey. These new standards are intended to greatly reduce consumer exposure to *Salmonella* and *Campylobacter*, and prevent thousands of cases of foodborne illness annually.
- **Implementation of Modernization of Poultry Slaughter Inspection:** FSIS further implemented the Modernization of Poultry Slaughter Inspection, which mandates that all poultry establishments take scientifically based approaches to prevent contamination, rather than addressing contamination after it has occurred. The rule also provides establishments with the option to join the New Poultry Inspection System (NPIS). With NPIS, food safety inspectors are now better equipped to verify that establishments maintain effective Hazard Analysis and Critical Control Point (HACCP) systems by increasing food safety and sanitation tasks, which is a more effective and efficient way to use our inspection resources.
- **Targeted and Streamlined Approach to Food Safety Assessments:** FSIS implemented a new, focused Food Safety Assessment (FSA) methodology that included conducting a Public Health Risk Evaluation (PHRE) to determine whether an FSA or immediate enforcement action was warranted. This new approach helps to ensure

that FSIS resources are aligned with public health risk, and allows FSIS to more efficiently use resources by targeting higher risk establishments.

- **Improved Performance of Verification Tasks for Shiga-toxin Producing *E. coli* (STEC):** In taking a number of steps to improve how inspection program personnel (IPP) perform verification tasks, FSIS has worked to further reduce the public's exposure to STEC. This included improving instructions to IPP to verify the scientific support for and effectiveness of antimicrobial interventions in controlling pathogens.
- **Enhanced Inspection Approach for Products from Other Countries:** FSIS worked with more than 35 countries to reduce consumer exposure to food safety hazards by providing food safety education, holding bilateral meetings on science based policy, and performing in country audits of higher risk countries. By working alongside various foreign regulatory counterparts, the Agency has helped other countries build and strengthen their own national food safety inspection programs, and improving the safety of our food imports. The percentage of importing countries requiring more immediate inspection or reinspection attention more than twice within the previous year exceeded its downward target of 20 percent by reaching 10 percent in FY 2016.
- **Drove Greater Industry Compliance through Investigations, Enforcement, and Surveillance:** FSIS increasingly conducted critical investigations, enforcement, and surveillance activities to protect public health and respond to food safety and food defense activities. These activities resulted in FSIS reaching more than 85 percent of all enforcement actions' targeting food safety-related violations. Also, follow-up surveillances resulted in an increase in compliance, exceeding FSIS' targets: 89.5 percent of follow-up surveillances resulted in compliance, and nearly 69 percent of not-for-cause surveillance activities were conducted in priority in-commerce facilities (e.g., warehouses and distributors).

#### **FSIS 2011-2016 Strategic Plan Goal 2: Maximize Domestic and International Compliance with Food Safety Policies**

Goal 2 focused on domestic and foreign-processed products and their adherence to food safety performance standards. In addition, this goal ensured that humane handling and slaughter practices were a central focus to establishments' procedures, and that regulated products are protected from intentional contamination. This goal was measured using three corporate measures: the percentage of broiler plants passing the carcass *Salmonella* verification testing, the percentage of official establishments with a functional Food Defense Plan, and the percentage of livestock slaughter plants that follow a systematic approach to humane handling. In FY 2016, results included the following:

- **Substantial Improvements on Broiler Carcass Standards:** While FSIS did not meet its FY 2016 target for the percent of broiler establishments passing the carcass *Salmonella* verification testing standard, the overall percent of establishments' passing the standard has risen consistently over the past 5 years, and in Q4, FSIS failed to meet the target as a result of just two establishments not passing the standard.
- **Major Strides in Humane Handling:** FSIS significantly increased the number of personnel and training available to inspectors on humane handling oversight, and worked to ensure that a consistent method for compliance was applied at all federally-inspected livestock slaughter establishments. In FY 2016, FSIS surpassed its humane handling target, with the highest percentage achieved since FSIS established its measure to encourage voluntary adoption of a systematic approach, reaching 78 percent.
- **Significant Progress in Domestic and International Outreach on Food Defense:** Through increased outreach and presence in the industry, FSIS saw an increase in domestic establishments' having voluntary functional food defense plans in place. Food defense in-commerce—after a product leaves the establishment yet before it enters a person's home—also increased. FSIS also developed and began implementing a multi-year Food Defense Strategy in FY 2016 as well. While FSIS did not meet its 90 percent FY 2016 target for voluntary adoption of domestic functional food defense plans (reaching 85 percent), this was a significant increase from 34 percent in 2006. Further, FSIS exceeded its other two food defense measures—reaching 96.5 percent (target 91 percent) of food defense practices implemented at in-commerce facilities, and 96.9 percent (target 90 percent) of outreach to eligible countries to encourage implementation of a system that protects product from intentional contamination.

**FSIS 2011-2016 Strategic Plan Goal 3: Enhance Public Education and Outreach to Improve Food-Handling Practices**

Goal 3 focused on enhancing public education and external outreach to improve food handling practices. In FY 2016, results included the following:

- **Enhanced Use of Various Online Platforms and Tools to Reach Industry and the Public:** FSIS adapted to new trends that emerged over the past 5 years using social media and other digital tools to improve public outreach. FSIS increased awareness through the FSIS website, FoodSafety.gov, YouTube, Twitter, and Facebook with results far exceeding expectations. In developing and promoting messaging about the four food safety steps - Clean, Separate, Cook, and Chill - FSIS educated millions of consumers about proper food handling behaviors. In FY 2016, FSIS increased its electronic media outreach by increasing page views on the FSIS website, exceeded its target of 84 million views by more than 7 million. Views of YouTube exceeded its target of 1.4 million views by reaching 1.487 million views, and the number of FSIS's Twitter followers exceeded its target of 780 thousand followers by reaching 787 thousand. Topics included outreach for Thanksgiving, Winter Holidays, the Super Bowl, Spring, Summer/Fourth of July, Mechanically Tenderized Beef, and Back to School.
- **Increased Outreach through Greater Community Presence:** FSIS successfully utilized its Food Safety Discovery Zone (FSDZ) mobile classroom to provide consumers with science-based, interactive, and hands-on food safety learning experiences that help protect them and their families from foodborne illness. The FSDZ schedule focused on visiting underserved or vulnerable populations, including Hispanics, military and rural families, families with children under 5 years of age, and Native Americans. The outreach to these particular groups significantly enhanced FSIS' ability to provide important food safety messages and support those audiences' understanding of FSIS policies and programs. Outreach conducted through the FSDZ helped FSIS exceed public education targets to at-risk and vulnerable audiences. In FY 2016, visitors to the FSDZ significantly exceeded the Agency's target of 720,000 visitors by nearly 320,000.

**FSIS 2011-2016 Strategic Plan Goal 4: Strengthen Collaboration among Internal and External Stakeholders to Prevent Foodborne Illness**

Goal 4 focused on the Agency's work with stakeholders to prevent and respond to intentional and unintentional food safety hazards. FSIS worked to strengthen the collaboration among internal and external stakeholders to prevent foodborne illness. In FY 2016, results included the following:

- **Maximized Relationships with Intra-departmental Partners:** FSIS actively updated its Research Priorities list, which encourages food safety research by other agencies that is relevant to FSIS-regulated products. Through the Research Priorities list, FSIS built on its existing partnerships with USDA's Agricultural Research Service (ARS), Economic Research Service (ERS), and National Institute of Food and Agriculture (NIFA) through organizing and hosting regular meetings to discuss research priorities, align areas for collaboration, and work on projects of benefit to several agencies. For example, collaboration with ARS resulted in an improved poultry carcass rinse solution, which was developed to mitigate the potential impact of intervention carry-over on FSIS pathogen monitoring to evaluate contamination levels on poultry carcasses. FSIS adopted the new rinse solution in July 2016.
- **Strengthened Key Collaborations with Federal Agencies:** The Interagency Food Safety Analytics Collaboration (IFSAC) was formed in 2011 as a tri-agency effort with the Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) to improve foodborne illness attribution. IFSAC has significantly improved attribution models, methods, and estimates, and helped FSIS to align its food safety strategies with FDA and CDC. An article on a foundational IFSAC project to assess differences between outbreak and sporadic illnesses was published in *Emerging Infectious Diseases* (EID) in July 2016. FSIS communicators worked closely with CDC and FDA counterparts to develop a variety of media materials. Publishing results from IFSAC projects is an important way to share advances in attribution with both the scientific community and other FSIS stakeholders. IFSAC also continued to formalize its processes through the development and implementation of a new Charter, and the development of a new Strategic Plan.

- **Maintained and Deepened Existing Collaborations to Achieve Multi-Agency Goals:** The Healthy People 2020 (HP2020) Initiatives have served as a science-based framework for public health activities by FSIS, CDC, FDA, and across other sections of the public health community for years. Food safety is a key component of HP, with an entire focus area dedicated to joint USDA, FDA and CDC efforts to reduce foodborne illnesses in the population, such as *Salmonella*. FSIS has used HP2020 goals as a foundation in a variety of high-level performance setting efforts, namely the FSIS All Illness Measure—with long-term goals that are based on HP2020 pathogen-specific goals; and the FSIS *Salmonella* and *Campylobacter* Pathogen Reduction Performance Standards, which factored in what reductions in these two pathogens would be necessary to meet the HP2020 goals. In addition, the Department of Health and Human Services' Agency Priority Goal to reduce the incidence rate for *Lm* is directly tied to the HP2020 goal to reduce the incidence of *Lm* infections, and represents a collaboration across CDC, FDA, and the National Institutes of Health (NIH).
- **Conducted Critical Outreach, Coordination, and Information Sharing Activities with External Partners and Industry:** Beyond working with federal partners, FSIS has conducted cross-cutting outreach activities, leveraged resources, and provided technical expertise, information, and advice to small and very small plant owners and operators, as well as promoted State participation in achieving food safety goals by engaging in cooperative activities, for example special webinars, with State agencies. The agency increased its targeted efforts with State Meat and Poultry Inspection Program (MPI) Directors, with greater resulting participation; the 27 MPI programs represent a significant FSIS investment and provide a critical link in this Nation's food safety infrastructure. In addition, FSIS hosted the National Advisory Committee on Meat and Poultry Inspection's meeting in March 2016, during which the Committee finalized reports on FSIS' involvement with *Lm* at retail and whether or not mandatory features should be included on product labels that are not ready to eat but appear ready to eat. Further, FSIS hosted five public meetings (two informational and three import) regarding FSIS' *Siluriformes* fish inspection, providing integral outreach to FSIS stakeholders and the catfish industry.

#### **FSIS 2011-2016 Strategic Plan Goal 5: Effectively Use Science to Understand Foodborne Illness and Emerging Trends**

Goal 5 tracked the effective use of science to understand foodborne illness and emerging trends. FSIS worked to continuously improve its analytic, forecasting, and traceback capabilities and methods based on supportable science and current data. FSIS also worked to identify ways in which emerging trends (e.g., consumption patterns, methods of distribution, the increasing virulence of certain pathogens, and the evolving global supply chain) influence food safety and defense, and to leverage collaborations in championing a comprehensive science agenda. FSIS collaborations with several internal and external partners created synergies with other partners and stakeholders on shared priorities, and addressed many significant needs, including plans to meet the Healthy People 2020 goals for *Salmonella* illness reduction. In FY 2016, results included the following:

- **Expanded Whole Genome Sequencing (WGS):** FSIS increased its focus on using whole genome sequencing (WGS) to characterize isolates from samples the agency collects. FSIS has standardized WGS methods and workflow; in addition, the agency now conducts WGS on *Salmonella*, STEC, *Campylobacter* and *Lm* isolates from ready-to-eat products, as well as all isolates collected as part of a human foodborne illness investigation. FSIS laboratories performed WGS on 3,175 FSIS isolates (1565 *Salmonella*, 240 STECs, 1140 *Campylobacter*, and 230 *Lm*) and uploaded the data to the National Center for Biotechnology Information (NCBI), and is actively collaborating with key Federal partners—FDA, CDC, and National Institutes of Health (NIH)—on WGS related issues. This is a good start to a program that we think will really help us in the future.
- **Analyzed Data for Hog Slaughter Risk Assessment:** FSIS finalized the analysis for a human health risk assessment to inform the modernization of hog slaughter in FY 2016. The risk assessment first determined the correlation between the activities of FSIS inspection personnel and *Salmonella* testing results in market hog slaughter establishments. FSIS then used that correlation to estimate how changing the activities in market hog establishments could affect *Salmonella* contamination and, subsequently, *Salmonella* illnesses.
- **Improved Outbreak Investigations:** The agency took a multi-pronged approach to limit consumers' exposure to FSIS-regulated products associated with foodborne-illness outbreaks by enhancing current processes that helped achieve greater efficiencies, and by generating better quality information from outbreak and traceback systems. For example, the agency developed an automated tool to rapidly summarize multiple establishments'

inspection histories when their products are suspected of being involved in an outbreak. Doing so allowed FSIS to identify potential problems within an establishment—such as a history of sanitation problems or positive samples—and to help direct the agency’s outbreak investigation. By the end of FY 2016, the time period from initiation of traceback to recall action took a median of 6 days, Consumer Compliant Monitoring System (CCMS) complaints were evaluated within 2 days of receipt, and all investigations were initiated in less than 9 days, with one that led to the timely recall of products misbranded with undeclared allergens.

- **Hazard Identification Team:** FSIS continued and formalized the Hazard Identification Team (HIT), whereby FSIS employees can raise potential emerging risks associated with FSIS-regulated products to the HIT for evaluation, through publishing a directive that mapped out its process. During FY 2016, the HIT evaluated eight issues ranging from toxic plants, to chicken livers, non-O157 STEC in swine, to different species of *Campylobacter* and *E. coli*. The HIT reviewed issues and, as appropriate, assigned task forces to review the literature and make recommendations.
- **Enhanced the National Residue Program to Increase Efficiency in Analysis and Reporting:** FSIS enhanced its National Residue Program by updating its scheduling algorithm, implementing new multi-analytic methods in the FSIS laboratories to identify and quantify chemical residues at much lower levels than previous methods, and outlining final policies on holding livestock carcasses targeted for chemical residue sampling.
- **Promoted an International Science Agenda through Codex Alimentarius:** In addition to its domestic science agenda, FSIS actively cultivated an international science agenda through the Codex Alimentarius Commission, an international body with more than 180 member countries and organizations. Codex standards, codes of practice, guidelines, and recommendations aim to ensure that food is safe and can be traded. FSIS shepherded guidelines for the control of *Salmonella* in beef and pork through the Codex Committee on Food Hygiene. In FY 2016, these guidelines became an official document for use by countries worldwide.
- **Increased Engagement with Partners on Antimicrobial Resistance (AMR) Issues:** FSIS collaborated within USDA, and with the CDC and FDA as a strong partner on AMR activities. FSIS assumed responsibility under the National Antimicrobial Resistance Monitoring System (NARMS) for conducting AST (antimicrobial susceptibility testing) for animal derived cecal samples. In support of NARMS, FSIS used cutting-edge science to monitor AMR at different points. FSIS also contributed significantly to the scientific aspects of USDA's internal and external communications on AMR.

#### **FSIS 2011-2016 Strategic Plan Goal 6: Implement Effective Policies to Respond to Existing and Emerging Risks**

A critically important part of FSIS activities includes developing and implementing policies and solutions to address food safety issues. FSIS continued to utilize a risk-based approach to develop and implement policies and measure their effectiveness, to address existing and emerging issues in collaboration with stakeholders. As part of this goal, the Agency kept abreast of current research and other developmental activities, and continuously assessed whether regulatory standards and guidance materials need revision. In FY 2016, results included the following:

- **Improved Approaches to Beef:** Key policy changes enabled FSIS to quickly identify and remove unsafe beef products in commerce and better identify the risks associated with different beef products. In FY 2016, this included enhancing its beef recordkeeping requirements for grinding logs at official establishments and retail to better trace the source of foodborne illness outbreaks involving ground beef, and to identify the source materials that need to be recalled. FSIS also issued labeling regulations on mechanically tenderized beef products that allow consumers and retailers to identify beef products with a higher potential of pathogens and the need for cooking to a safe temperature.
- **Introduced Allergen Labeling Guidance to Protect Consumers:** In addition to policy activities associated with preventing pathogen contamination, FSIS also increased its focus on reducing exposures to undeclared allergens to protect consumers. Meat and processed egg products that contain allergens that are not appropriately labeled result in preventable recalls. These recalls are often because establishments have made changes in ingredients; they are due to products being put in the wrong packages or products with misprinted labels. Given an increase in recalls of FSIS-regulated products containing undeclared allergens, in FY 2016, FSIS issued the *Compliance Guidelines for Allergens and Ingredients of Public Health Concern: Identification, Prevention and Control, and Declaration through Labeling*, to improve and facilitate establishment compliance

with public health regulations, and reduce potential threats to public health through consumers' being exposed to undeclared allergens.

- **Updated Validation Guidance:** The implementation of Hazard Analysis and Critical Control Points (HACCP) has helped ensure the overall safety of products that FSIS regulates. HACCP is a scientific system of process controls that has long been used in food production to prevent problems by applying controls at points in a food production process where potential hazards can best be controlled, reduced, or eliminated. FSIS-regulated establishments must have effective HACCP systems to comply with regulatory requirements and prevent product adulteration. To ensure field employees and industry stakeholders clearly understood HACCP Systems Validation guidelines, FSIS employed YouTube training videos as well as live webinars in 2016 on HACCP validation requirements.
- **Increased the Use of Data, Assessments, and Science to Drive Policy Development:** With the agency's Public Health Information System (PHIS), the availability of real-time field inspection and sampling data continues to become more accessible and instrumental in informing both policy content and process implementation. Using PHIS data and the associated analysis of those data has also enabled FSIS to begin to develop guidance and tools that make new policies easier for field staff and establishment to implement them. Examples include STEC methods and risk profiles; no-objection letter (NOL) assessments; several microbiological baselines to support performance standards and other policies; development of neutralized buffered peptone water and application of field, and other activities.

#### **FSIS 2011-2016 Strategic Plan Goal 7: Empower Employees with the Training, Resources, and Tools to Enable Success in Protecting Public Health**

Goal 7 worked to create an engaged workforce focused on protecting public health and foster a safe and healthy environment for its employees. The Agency represents a single, unified team and uses feedback from all employees across the organization to inform management decisions. FSIS continuously improves training opportunities and recruitment processes, as well as promotes diversity across the organization. In FY 2016, results included the following:

- **Increased Employee Satisfaction Demonstrated in a Higher Federal Employee Viewpoint Survey (FEVS) Ranking:** Overall, FSIS' employees reported increasing levels of satisfaction over this period, reaching 93rd out of 320 "Best Places to Work in the Federal Government." Top results included employees' indicating that they like their work, understand how it relates to agency goals, have a sense of accomplishment, and believe in being held accountable. In 2016, the average score on the Annual Employee Viewpoint Survey for questions related to workers' understanding of their impact on public health met its indexed target of 93 percent.
- **Launched New FSIS-Wide Employee Engagement Activities, Including the i-Impact Food Safety Campaign:** FSIS successfully deployed the first phase of a major internal campaign, i-Impact, to engage employees on how their work is reflected in the agency's strategic and annual plans, and how the agency's key goals, priorities, measures, and targets are aligned with each employee's standards. This campaign included employee engagement sessions across the country, with a more than 91 percent participation rate and a strong positive response from participants. It also laid the groundwork for broader and deeper understanding of FSIS' new FY 2017-2021 Strategic Plan and 2017 Annual Plan, and each employee's "line of sight" that clearly shows how their work matters to advancing food safety and public health.
- **Improved Safety and Workers' Compensation Procedures:** FSIS leveraged the Department's updated policy for returning injured workers to employment status as well as its standard operating procedures to allow greater ease in case management and returning employees to work after recovery.
- **Increased Education and Awareness on Equal Employment Opportunity (EEO) and Civil Rights:** FSIS took several actions to increase awareness of EEO and civil rights among employees; this included conducting cyclical Compliance, Assistance, Review, and Evaluation (CARE) assessments to evaluate work units' compliance with EEO and Civil Rights laws, regulations, and policies, as well as their knowledge and perceptions of their program's EEO and CR programs. It also included requiring the workforce to have annual EEO and civil rights training. FSIS continues to hold well-received annual Diversity Conferences, with a large mix of attendees from all over the country each year. In FY 2016, the percentage of all managers/supervisors who completed three hours of EEO training annually exceeded its target of 95 percent and reached 100 percent.

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The percentage of all non-managers/non-supervisors who completed two hours of EEO training annually exceeded its target of 90 percent by reaching 100 percent as well.

- **Enhanced Overall Hiring Process and Performance, as well as its Employee Relations Case Record:** FSIS took several steps to improve the applicant experience, its tracking system, and other hiring reforms. These contributed to a reduction in the time to hire for front line occupations—i.e. from submission of materials to onboard—from more than 250 days to fewer than 80 days on average, while the agency processed a significantly higher number of hires and promotions in the 2015-2016 time period. FSIS continues to conduct outreach and recruitment efforts designed to increase applicant pools, including for individuals with targeted disabilities. The agency also reduced its employee relations case backlog by 11 months.
- **Increased Emphasis on Leadership Development and Management Accountability:** While investing in its workforce as a whole, FSIS also specifically focused on enhancing leadership development for its managers and supervisors. FY 2016 key activities included developing a Leadership Competency Model and an accompanying reference guide to assist with outreach, recruitment, career development, succession planning, and evaluation. The agency additionally began developing models for mission critical occupations. Relatedly, FSIS exceeded USDA requirements for 360 assessments.
- **Improved Administrative Services:** FSIS led USDA's Marketplace for Shared Service initiative, which resulted in the deployment of an electronic service menu for administrative services within USDA to reduce the number of service providers and costs, while increasing service quality, timeliness, and standardization.

### **FSIS 2011-2016 Strategic Plan Goal 8: Develop, Maintain, and Use Innovative Methodologies, Processes, and Tools, including PHIS, to Protect Public Health Efficiently and Effectively to Support Defined Public Health Needs and Goals**

Goal 8 was focused on evaluating, adopting, and applying innovative methods, processes, or technologies, including PHIS, to minimize food safety hazards and serve the Agency's mission. In FY 2016, results included the following:

- **Prioritized Innovation within the Agency to Modernize Food Safety:** Recognizing that the food safety agency of the twenty-first century must respond to a variety of threats, FSIS prioritized the expansion of innovative processes, and for the first time, established criteria to identify and develop innovative processes, methodologies, and technologies. Of those identified, the agency created performance baselines to measure effectiveness, evaluated their performance, and implemented those passing the effectiveness criterion. Additionally, FSIS introduced a life-cycle management process to analyze initiatives post-baseline review to ensure the agency received continued value in terms of time savings, cost savings, improved accuracy, increased data availability, or public health impact. In FY 2016, the percentage of innovative processes, methodologies, or technologies that, once employed, are evaluated by the agency significantly exceeded its target of 76 percent, reaching 100 percent. In addition, the percentage of documented implemented processes, methodologies, or technologies that were evaluated to assess whether they meet the intended outcomes or otherwise contribute to the Agency's efforts to perform its mission exceeded its 80 percent target by reaching 84 percent.
- **Utilized Social Media to Amplify Consumer Engagement:** FSIS utilized innovative tactics to expand its consumer engagement reach through using social media for targeted campaigns, such as live-tweeting food safety information with images during a weekend movie event. This effort led to an increased number of new Twitter followers who proved more likely to share information.
- **Improved Public Access to More Data and Services:** FSIS designed/redesigned several mobile applications for greater interaction with the public as well as ensured that the data behind the apps were made public online via Data.gov. The Agency's FSIS Meat, Poultry, and Egg Product Inspection (MPI) Directory mobile app helped improve public access to more data and information on regulated establishments. The data for this and the FoodKeeper app (mentioned in Goal 3), was made available online via Data.gov. In support of open data and transparency initiatives, the agency also held its first DataJam and began the public release of establishment-specific data, an FSIS first.

## **Section 2: Selected Accomplishments Expected at the 2018 Proposed Resource Level**

FSIS published its 2017-2021 Strategic Plan in early FY 2017, which contains three goals, six outcomes, and fifteen objectives that represent the agency's path forward over the next 5 years. Our three goals are Prevent Foodborne Illness and Protect Public Health; Modernize Inspection Systems, Policies, and the Use of Scientific Approaches; and Achieve Operational Excellence. The Plan builds on prior successes and reflects emerging issues that FSIS faces in ensuring that the food products we regulate are safe to eat. By using cutting-edge yet practical science, enhanced data capabilities, and our employees' skills and expertise, we will continue to modernize and be more effective in meeting our public health mission. FSIS will assess its progress using 25 measures, two of which are key Departmental indicators.

### **FSIS Goal 1: Prevent Foodborne Illness and Protect Public Health**

Our primary mission goal directly represents the day-to-day work of a large majority of our employees. Its outcomes are to prevent contamination and to limit illness from regulated products. FSIS will achieve these outcomes through several objectives aimed at protecting against unintentional and intentional contamination. Specifically, we will:

- Drive compliance with food safety statutes and regulations by:
  - Focusing assessments of domestic establishments' food safety systems using tools such as alerts that identify patterns and trends in noncompliance.
  - Enhancing product sampling, outreach, technical assistance, and information sharing with other countries regarding FSIS regulatory requirements and FSIS' work to ensure public health standards for food safety are established and met.
- Reduce the presence of hazards in food through influencing the behavior of establishments by increasing the percent of products from FSIS-regulated establishments sampled for microbial or chemical hazards, as well as verifying the effectiveness of establishments' food safety programs and process controls to increase the percent of establishments that meet new pathogen reduction performance standards.
- Continue to improve food safety at in-commerce facilities by using a risk-based approach to target FSIS' resources, including resources used for surveillance activities, investigations, enforcement activities, and other initiatives, with an increased focus on *Lm* in retail delis.
- Enhance response to outbreaks through improved communications and information sharing, and collaborating with partners on investigations and removal of contaminated product from commerce.
- Sustain progress in food defense by encouraging establishments to adopt and incorporate food defense practices into their day-to-day operations, and that agency personnel and industry are prepared and able to respond to act of intentional contamination.
- Increase public awareness of recalls, foodborne illness, and adoption of safe food practices through the execution of more proactive strategies and social science research.

### **FSIS Goal 2: Modernize Inspection Systems, Policies, and the Use of Scientific Approaches**

Our second mission goal, "Modernize Inspection Systems, Policies, and the Use of Scientific Approaches," represents key methods and approaches we intend to use to enhance how we realize our food safety and public health mission. Its outcomes are to adopt innovative approaches and improve information and data access. FSIS will achieve these outcomes through objectives aimed at modernizing scientific techniques and inspection procedures, increasing awareness of humane handling best practices; and improving the reliability, access, and timely collection and distribution of information and data. Specifically, we will:

- Enhance efforts in rapid in-field screening and whole genome sequencing to aid in accurately identifying and expeditiously responding to outbreaks, conducting trace backs, and studying the environmental influences on pathogens in regulated establishments.

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- Use data from PHIS and new data generated from enhanced scientific techniques to facilitate inspection task scheduling across individual establishments.
- Increase awareness of humane handling best practices through broader and targeted outreach to the livestock industry, specifically on handling and stunning requirements.
- Improve reliability, access, collection, and timely distribution of information and data to facilitate communications among FSIS headquarters and field employees, and external stakeholders, by ensuring employee access to systems and tools and the ability to obtain FSIS data, targeted reports, and other information needed to prioritize and manage work.

### **FSIS Goal 3: Achieve Operational Excellence**

Our third goal, “Achieve Operational Excellence,” pinpoints key areas where we seek improvement in how we do business to better support achieving our first two goals and our overall mission. Its outcomes focus on recruiting, engaging, and training our workforce, and on improving our processes and services, through several objectives. Specifically, we will:

- Improve recruitment and retention for mission-critical positions, primarily through using strategies that target key occupations.
- Enhance training and development opportunities in several managerial, inspection, and technical areas through using competency models and expanded training and development approaches.
- Ensure equal opportunity and a diverse and inclusive environment for employees through encouraging model Equal Employment Opportunity approaches as well as continuing to deploy and enhance workplace environment activities.
- Enhance efficiency and effectiveness of key business processes and systems, while also improving service delivery, through analysis of existing processes and services and identification of areas for streamlining and FSIS provides in-plant inspection of all domestic processing and slaughter establishments preparing meat, poultry, and processed egg products for sale or distribution into commerce, as well as surveillance and investigation of all meat, poultry, and egg product facilities. FSIS inspection program personnel are present for all domestic slaughter operations, inspect each livestock and poultry carcass, and inspect operations at each processing establishment at least once per shift. In addition to in-plant personnel in federally inspected establishments, FSIS employs a number of other field personnel, such as laboratory technicians and investigators. Program investigators conduct surveillance, investigations, and other activities at food warehouses, distribution centers, retail stores, and other businesses operating in commerce that store, handle, distribute, transport, or sell meat, poultry, or processed egg products to the consuming public. FSIS ensures the safety of imported products through a three-part equivalence process which includes (1) analysis of an applicant country’s legal and regulatory structure, (2) initial and periodic on site equivalence auditing of the country’s food regulatory systems, and (3) continual point-of-entry re-inspection of products received from the exporting country. FSIS also has cooperative agreements with 27 States that operate intrastate meat and poultry inspection programs. FSIS conducts reviews of these State programs to ensure that they are “at least equal to” the Federal program. Additionally, FSIS regulates interstate commerce through cooperative agreements with four States that already have MPI programs that are identical to the Federal program and allows those establishments to ship products across state lines and also, potentially, to export them to foreign countries.

### **Section 3: Summary of Budget and Performance**

The following information covers reporting related to key performance indicators (KPIs) that FSIS is closing out in 2016, as well as new KPIs as of 2017 that are included in the new FSIS 2017-2021 Strategic Plan.

### **Key Performance Outcomes and Measures**

The Food Safety and Inspection Service (FSIS), a public health regulatory agency within the U.S. Department of Agriculture (USDA), is responsible for ensuring that the commercial supply of meat, poultry, and processed egg products moving in commerce, including products for import or export, are safe, secure, wholesome, and correctly labeled and packaged. Legislative mandates provide FSIS with the authority to conduct its public health mission. Ensuring the safety of the Nation's food supply requires a strong and robust infrastructure coupled with sound science. FSIS uses a data-driven, scientific approach to food safety, incorporating both FSIS sampling data and public health data critical to combating the ever-changing threats to public health and reducing foodborne illness. FSIS achieves this approach through inspections, enforcement efforts, pathogen verification testing, consumer education, partnerships with its stakeholders, and science-based policy decisions.

FSIS reports three corporate performance measures by which FSIS measures its progress that were in the FSIS 2011-2016 Strategic Plan, which had range of metrics designed to measure Agency progress in preventing contamination, reducing foodborne illness, and other key areas.

### **Key Outcome 1: Preventing Foodborne Illness Associated with the Consumption of Meat, Poultry, and Processed Egg Products**

**Key Performance Measures:** The continued mission of FSIS is to protect consumers by ensuring that the commercial supply of meat, poultry, and processed egg products is safe, secure, correctly labeled, and packaged. FSIS annually reported on the following performance measures to gauge overall effectiveness:

- Increase in the percentage of FSIS-regulated young chicken (broiler) establishments that pass a tightened performance standard for *Salmonella*, which was implemented in July 2011.
- Total annual number of estimated illnesses from *Salmonella*, *Lm*, and *E. coli* O157:H7 from all FSIS-regulated products, otherwise known as the All-Illness Measure. These pathogens are of particular concern for FSIS-regulated products because data have linked these pathogens to human illness.
- Adoption rate of voluntary functional food defense plans by regulated establishments.

By implementing steps to reduce the presence of pathogens and improve protection of the food supply, FSIS has worked to reduce the overall number of foodborne illnesses experienced by American consumers.

**Key Performance Measures**

**FSIS Corporate Performance Measure: Percentage of Broiler Plants Passing the Carcass *Salmonella* Verification Testing**

In 2011, FSIS established a performance standard for *Salmonella* in broiler carcasses. This standard is designed to encourage industry to control for *Salmonella* and reduce the potential for human exposure. Failure to meet this standard serves as a proxy for heightened exposure potential to the public.

	Percent of Establishments with a Functional Food Defense Plan								
	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	Result	2017 Target	
Percent	75%	77%	83%	84%	85%	85%	Unmet	No longer being used	
	<b><u>Allowable Data Range for Met:</u></b> FSIS must meet or exceed the target to report the target was met.								
	<b><u>Assessment of Performance Data</u></b>								
	<b><u>Data Source:</u></b> Agency annual questionnaire in PHIS issued to FSIS Inspection Program Personnel (IPP) in all regulated meat and poultry establishments, processed egg product plants, and import inspection establishments.								
	<b><u>Completeness of Data:</u></b> The data is complete, with surveys conducted at approximately 98 percent of surveyed establishments in 2016.								
	<b><u>Reliability of Data:</u></b> The data from the food defense plan survey have been collected from trained FSIS IPP since the survey was initiated in 2006. However, since food defense is not mandatory in FSIS-regulated establishments and the degree to which food defense measures are implemented may be subjective, survey results may differ based on subjectivity of IPP.								
	<b><u>Quality of Data:</u></b> The data from the food defense plan survey have been collected from trained FSIS IPP since the survey was initiated in 2006. However, since food defense is not mandatory in FSIS-regulated establishments and the degree to which food defense measures are implemented may be subjective, survey results may differ based on subjectivity of IPP.								

**Analysis of Results**

**Selected Past Accomplishments Toward the Achievement of the Key Outcome FY 2016:**

This measure tracks the percent of young chicken (broiler) establishments passing the carcass *Salmonella* Verification Testing Standard. While FSIS did not meet the FY 2016 target for the percent of broiler establishments passing the carcass *Salmonella* verification testing standard, the overall percent of establishments passing the standard has risen consistently since measurement began over 5 years ago, and the FY 2016 final target was missed as a result of two establishments not meeting the target.

FSIS continued its multipronged approach to combat *Salmonella* in FY 2016. In FY 2016, FSIS:

- Continued to implement Modernization of Poultry Slaughter Inspection, which requires all poultry slaughter establishments (except those that slaughter ratites) to comply with new establishment sampling and testing requirements.
- Developed and implemented the conversion of poultry slaughter establishments to the New Poultry Inspection System (NPIS).
- Began implementing performance standards for *Salmonella* and *Campylobacter* on raw comminuted poultry and raw chicken parts, which includes:

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- Evaluating whether establishments meet new pathogen reduction performance standards for chicken parts and comminuted chicken and poultry.
- Evaluating data to inform sampling plan development for product that has historically been excluded from *Salmonella* verification testing. FSIS expects to begin sampling excluded product in FY 2017.
- FSIS began pork exploratory sampling in FY 2015, and will be conducting a baseline in FY 2017. Results from the baseline study will be used to develop prevalence estimates and industry guidance and/or develop performance standards.

**FSIS Corporate Performance Measure: Total Number of *Salmonella*, *Lm*, and *E.coli* O157:H7 Illnesses from Products Regulated by FSIS**

In 2011-2016, FSIS measured its performance on reducing the estimated total number of *Salmonella*, *Lm*, and *E. coli* O157:H7 illnesses from all FSIS regulated meat, poultry, and processed egg products. These estimates were based on pathogen-specific case rates from the Centers for Disease Control and Prevention (CDC) FoodNet data, simple food attribution estimates derived from a rolling 3-year window of CDC’s Foodborne Disease Outbreak Surveillance System (FDOSS) database, and were anchored to pathogen-specific illness reduction Department of Health and Human Services (DHHS) Healthy People 2020 (HP2020) goals.

Total (All) Illness Measure ( <i>Salmonella</i> , <i>Lm</i> and <i>E. coli</i> O157:H7) /2/							
	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	Result	2017 Target
Total Illnesses	479,621	427,171	386,265	382,123	658,405	Unmet	No longer being used
Cost	\$704,199	\$681,485	\$702,314	\$711,123	\$715,316		
<b><u>Allowable Data Range for Met:</u></b> FSIS must meet or exceed the target to report the target was met.							
<b><u>Assessment of Performance Data</u></b>							
<b><u>Data Source:</u></b> Estimates of total illness from all FSIS-regulated products are based on case rates from CDC’s FoodNet data and simple food attribution estimates derived from CDC’s FDOSS outbreak database. They are linked to the DHHS HP2020 pathogen reduction goals.							
<b><u>Completeness of Data:</u></b> The CDC FoodNet program monitors the incidence of laboratory-confirmed infections caused by nine pathogens transmitted commonly through food in 10 U.S. sites, covering approximately 15 percent of the U.S. population, though CDC case rates are thought to generally represent the entire U.S. population. The case rates CDC provides to FSIS on a quarterly basis lag by one quarter, meaning that illness estimates lag by one quarter. CDC outbreak data is reported by State, local, and territorial public health agencies to CDC, but differences exist between states in reporting rates and other key reporting elements							
<b><u>Reliability of Data:</u></b> The CDC FoodNet program is active, population-based surveillance for laboratory-confirmed infections. However, these data are subject to limitations. The CDC FDOSS program is a passive surveillance system. CDC collects reports of foodborne outbreaks due to enteric bacterial, viral, parasitic, and chemical agents. The CDC surveillance team analyzes these data to understand the impact of foodborne outbreaks and the pathogens, foods, settings, and contributing factors (for example, food not kept at the right temperature) involved. As with the FoodNet program, these data are subject to limitations.							
<b><u>Quality of Data:</u></b> Each of the data sources used to estimates illnesses has a number of limitations that affect the quality of the data used.							

### Analysis of Results

#### Selected Past Accomplishments Toward the Achievement of the Key Outcome FY 2016:

FSIS met its *E. coli* O157:H7 and *Lm* targets, though it did not achieve its FY 2016 All Illness or *Salmonella* targets because the CDC outbreak data from 2011-2013 used to estimate the percent of illnesses attributed to FSIS-regulated products excluded a very large outbreak in FDA-regulated shell eggs, and included a large outbreak in FSIS-regulated chicken products. FSIS' methodology includes only 3 years of data, and large outbreaks coming into or falling out of the dataset highly influences the attribution estimates, which FSIS recognizes was a limitation of the methodology.

To address this, FSIS updated its method for estimating illnesses attributed to FSIS-regulated products by incorporating an improved attribution methodology from the Interagency Food Safety Analytics Collaboration (IFSAC) to make it less sensitive to year-to-year fluctuations, among other improved inputs. In addition, rather than presenting one combined illness measure, FSIS is utilizing separate illness estimates for *Salmonella*, *Lm*, and *E. coli* O157:H7, including estimates for non-O157 STEC and *Campylobacter*, and will monitor these annually. This information is further delineated in FSIS' FY 2017-2021 Strategic Plan and its 2017 Annual Plan. These enhancements will provide greater transparency and understanding regarding the pathogen(s) causing the majority of estimated illnesses, facilitating a more detailed assessment of agency progress.

A key component of food safety activities is the sampling and analysis for pathogens, adulterants, and contamination. Data analysis shows that sampling food for hazards leads to a drop in contamination rates. FSIS implemented its first Five-Year Sampling Plan in FY 2016, which outlined FSIS' vision and expanded on the Agency's annual plans. The plan includes laying out a strategy to address current gaps in FSIS sampling and close existing sampling exceptions, and describes how it will expand sampling into new focus areas while achieving efficiencies. FSIS also continued work to publish an annual sampling plan related to microbiological, chemical residue, and other sampling programs in domestic establishments, import establishments, and in-commerce facilities, and the plan describes FSIS' overall strategy for directing its sampling resources. FSIS' increase in its laboratory analysis program reflects an integrated approach to food safety, and has made great strides in reducing illnesses in large part because of scientifically-derived standards and the sampling program. Additionally, positive samples are tested for antimicrobial resistance, which enables better tracking and prevention of antimicrobial resistant bacteria.

In addition to FSIS inspection, enforcement, and sampling efforts designed to reduce illnesses, FSIS conducts public education efforts intended to raise public awareness about the steps consumers can take in the home to reduce their risk of contracting foodborne illness (i.e. Clean, Separate, Cook, Chill). Such efforts include the following:

- Launched the FoodKeeper application in April 2015, which provides consumers with information about safe handling and storage times, reducing food waste while supporting food safety. This is an effective way to educate consumers about proper food storage and its relationship to safe food handling behaviors. In FY 2016, an additional 40,000 users downloaded the application, bringing its total installs to more than 125,000.
- Engaged the public through the @USDAFoodSafety Twitter and the FoodSafety.gov Facebook accounts. Continued growth throughout the year using non-traditional topics to communicate food safety messages on Twitter saw a 15 percent increase from last year. Facebook engagements increased by 10 percent. FSIS has seen success on Twitter, reaching a new total of 787,072 followers which surpassed the target of 780,000 set for FY 2016.
- FSIS increased the use of innovative online consumer education tools such as Ask Karen, which the database received 11,116 email questions and 2,389,921 answers were viewed in FY 2016. FSIS enables a chat feature allowing consumers to chat on-line with a Hotline food safety specialist. These efforts include 2,636 chat requests received in FY 2016.
- Since its inception in 1985, the Meat and Poultry Hotline has handled more than 3 million public inquiries. Hotline staff responded to more than 51,000 consumer inquiries via the Meat and Poultry Hotline during FY 2016. Meat and Poultry Hotline staff also responded to 14,681 email inquiries during FY 2016.
- In FY 2016, FSIS has continued to see high engagement on food safety messages communicated through infographics. For example, FSIS shared the *Food Safety Before, During, and After a Power Outage* infographic multiple times on social media platforms, which generated more than 1.6 million impressions on Twitter.

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- Overall, FSIS’ Twitter messages received more than 12.5 million impressions and 160,567 engagements this year (an engagement is the number of unique people who have clicked, liked, commented on or shared posts). FSIS’ Facebook messages posted to the FoodSafety.gov Facebook page also received more than 8 million impressions and 388,162 engagements.

**FSIS Corporate Performance Measure: Percent of Establishments with a Functional Food Defense Plan**

FSIS began measuring the status of industry’s voluntary adoption of food defense plans through annual surveys of FSIS Inspection Program Personnel (IPP) in 2006. The survey responses are used to determine whether each FSIS-inspected establishment has a functional food defense plan (i.e., the plan is documented; the measures in the plan are implemented, the plan is tested to ensure the measures are working; and the establishment reviews and updates their plan at least annually).

Percent of Establishments with a Functional Food Defense Plan							
	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Actual	Result	2017 Target
Percent	77%	83%	84%	85%	85%	Unmet	No longer being used
Cost	\$98,301	\$97,468	\$100,445	\$101,775	\$102,367		
<b><u>Allowable Data Range for Met:</u></b> FSIS must meet or exceed the target to report the target was met.							
<b><u>Assessment of Performance Data</u></b>							
<b><u>Data Source:</u></b> Agency annual questionnaire in PHIS issued to FSIS Inspection Program Personnel (IPP) in all regulated meat and poultry establishments, processed egg product plants, and import inspection establishments.							
<b><u>Completeness of Data:</u></b> The data is complete, with surveys conducted at approximately 98 percent of surveyed establishments in 2016.							
<b><u>Reliability of Data:</u></b> The data from the food defense plan survey have been collected from trained FSIS IPP since the survey was initiated in 2006. However, since food defense is not mandatory in FSIS-regulated establishments and the degree to which food defense measures are implemented may be subjective, survey results may differ based on subjectivity of IPP.							
<b><u>Quality of Data:</u></b> The data from the food defense plan survey have been collected from trained FSIS IPP since the survey was initiated in 2006. However, since food defense is not mandatory in FSIS-regulated establishments and the degree to which food defense measures are implemented may be subjective, survey results may differ based on subjectivity of IPP.							

**Analysis of Results**

**Selected Past Accomplishments Toward the Achievement of the Key Outcome FY 2016:**

FSIS completed the Eleventh Annual Food Defense Plan Survey in April and May 2016. As in previous years, the survey included IPP at meat and poultry slaughter and processing establishments, processed egg products plants, and official import inspection establishments. The response rate for the 2016 survey was 98 percent.

The 2016 survey found that 85 percent of all establishments have a functional food defense plan, up from 34 percent when the survey was initiated in 2006. As in previous years, larger establishments have a higher rate of implementing functional food defense plans: 98 percent of large establishments and 92 percent of small

establishments have functional food defense plans, while 78 percent of very small establishments have functional plans.

While FSIS' goal was to have 90 percent of all official establishments with a functional food defense plan, it did not meet this ambitious target for this voluntary program. FSIS conducted a variety of outreach activities to increase the percentage of establishments with functional food defense plans, including developing guidance and tools, delivering presentations, conducting workshops, and mailing letters.

For example, over fiscal year (FY) 2016, FSIS published more than ten food defense-related articles in the Constituent Update, which is an Agency publication for industry members. Article topics covered insider threats, cyber security, and international food defense, to name a few. In addition, FSIS sent five separate emails to over 100 industry stakeholders to provide information on the Department of Homeland Security's National Terrorism Advisory System (NTAS) Bulletins, the food defense plan survey, active shooter awareness, and the Homeland Security Information Network (HSIN). FSIS also updated the public-facing FSIS food defense webpage to provide easier access to food defense information, tools, and resources. The update included highlights of the food defense mission and program priorities for the Agency and also organized information into clear, concise categories highlighting information on food defense plans, international food defense activities, and tools, resources and training, and more.

#### Select Accomplishments Expected at FY 2018 Proposed Resource Level/Challenges for the Future, with FSIS 2017-2021 Strategic Plan Key Performance Measures

FSIS published its 2017-2021 Strategic Plan in early FY 2017, which contains three goals, six outcomes, and fifteen objectives that represent the agency's path forward over the next 5 years. Our three goals are: Prevent Foodborne Illness and Protect Public Health; Modernize Inspection Systems, Policies, and the Use of Scientific Approaches; and Achieve Operational Excellence. FSIS will assess its progress using 25 measures, two of which are KPIs. FSIS intends for these two new measures, which are directly tied to FSIS core inspection functions, to better reflect the Agency's efforts to reduce foodborne illnesses, and on a timelier basis. FSIS will also annually track a set of microbiological contamination rates and illness estimates for the purpose of monitoring key trends.

#### **FSIS Corporate Performance Measure 1: Percentage of Establishments that Meet Pathogen Reduction Performance Standards**

In February 2016, FSIS issued a final *Federal Register Notice* announcing that it would begin assessing whether establishments meet pathogen reduction performance standards for *Salmonella* and *Campylobacter* in raw chicken parts and not-ready-to-eat (NRTE) comminuted chicken and turkey products. FSIS' new measure, which calculates the percentage of establishments meeting these pathogen reduction performance standards, was developed because of the importance FSIS places on using performance standards to help reduce and/or prevent the contamination of regulated products.<sup>1</sup> FSIS has used pathogen reduction performance standards as a tool, both in the past and increasingly into the future, to effectively bring about reductions in contamination of FSIS-regulated products, which are ultimately tied to reductions in foodborne illness. For each pathogen/product pair with a performance standard, this measure is calculated by dividing the number of establishments that passed all of their included moving windows<sup>2</sup> by the total number of establishments with at least one completed moving window that either passed or failed. The baseline for this measure is currently 75 percent.

#### **FSIS Corporate Performance Measure 2: Percentage of Establishments Whose Noncompliance Rate Decreases 120 Days after Receiving an Early Warning Alert**

This new measure continues FSIS' work to use data-driven approaches to detect trends in establishment performance and expands the usefulness of a key tool utilized by the agency—the Public Health Regulations (PHRs)—to track how effectively FSIS's inspection workforce reacts to and resolves public health issues. PHRs are a subset of regulations associated with higher noncompliance rates in establishments in the 3 months before a

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<sup>1</sup>See <https://www.federalregister.gov/documents/2016/02/11/2016-02586/new-performance-standards-for-salmonella-and-campylobacter-in-not-ready-to-eat-comminuted-chicken>.

<sup>2</sup>A "moving window" is an approach to sampling in which FSIS evaluates a set number of sequential results from a single establishment to assess process control. For example, if FSIS chose to evaluate 20 results under the moving window approach, FSIS would assess the most recent 20 FSIS results for a particular establishment. The "moving window" approach provides FSIS with more flexibility for scheduling sample collection at different establishments.

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positive pathogen sampling result or enforcement action, than in establishments without pathogen-positives or enforcement actions. FSIS uses the results of inspection tasks to calculate a PHR non-compliance rate for each regulated establishment and issues a PHR Early Warning Alert when an establishment has a non-compliance rate that is elevated and is at or exceeds the FSIS Noncompliance Cut Point for Early Warning. FSIS began utilizing these Early Warning Alerts in Q4 of FY 2016, and is gathering sufficient data to develop a baseline for use starting in FY 2017 Q3. This measure was developed because of the importance FSIS places on prioritizing Food Safety Assessments (FSAs), which should help reduce non-compliance. Specifically, this measure calculates the percentage of establishments that improve their performance (fewer non-compliances) within 120 days of receiving a PHR Early Warning Alert.

### Additional Accomplishments Expected at the FY 2018 Proposed Resource Level/Challenges for the Future

FSIS continues to move forward in strengthening and using data and scientific evidence to drive better decision-making and achieve greater impact, including through continued updates to PHIS, which now captures data in automated and useful formats, and developing and using additional tools. FSIS activities represent a coordinated and integrated effort to improve the quality and quantity of data that FSIS captures, improve the usefulness of its information, conduct better analysis, become more proactive on reducing illnesses, improve the ability to rapidly adjust to food safety threats that do occur, and to become more effective in performing the FSIS mission.