2015 Explanatory Notes
Economic Research Service

Contents

Purpose Statement

The Economic Research Service (ERS) was established in 1961 from components of the former Bureau of Agricultural Economics principally under the authority of the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627). The mission of ERS is to inform and enhance public and private decision making on economic and policy issues related to agriculture, food, the environment, and rural development.

Activities to support this mission and the following goals involve research and development of economic and statistical indicators on a broad range of topics, including but not limited to global agricultural market conditions, trade restrictions, agribusiness concentration, farm business and household income, farm and retail food prices, food borne illnesses, food labeling, nutrition, food assistance programs, agrichemical usage, livestock waste management, conservation, genetic diversity, technology transfer, and rural employment. Research results and economic indicators on such important agricultural, food, natural resource, and rural issues are fully disseminated to public and private decision makers through reports and articles; special staff analyses, briefings, presentations, and papers; databases; and individual contacts. More information on ERS' program is contained on the ERS Web site at: www.ers.usda.gov.

The ERS headquarters is in Washington, D.C. ERS does not have any field offices. As of September 30, 2013, there were 327 permanent full-time employees.

ERS did not have any direct Office of Inspector General (OIG) or Government Accountability Office (GAO) audits or evaluations conducted during 2013.

During 2013, ERS launched an internal review of its Market Outlook Program, with external input being provided by the Farm Foundation through focus-group sessions with stakeholders. Objectives of the review are: (a) to obtain an objective, rigorous assessment of the demand for market outlook analysis across key stakeholder groups and identify alternative ERS outlook product options that could better meet those demands; (b) to identify options for integrating possible changes in ERS outlook products with the needs of the USDA outlook program; and (c) to identify options for expanding the pool of potential recruits with the appropriate skills for ERS market analysis positions. The review is ongoing and results will be available by September 2014.

ERS is one of 14 Principal Statistical Agencies in the Federal government. In 2013, the Agency conducted reviews of its data policies and data dissemination. An internal committee developed a new data policy that is consistent with Statistical Policy Directives and other standards issued by the Office of Management and Budget (OMB) in its role as coordinator of the Federal statistical system and USDA Information Quality Guidelines. Following the guidelines established in the new policy, ERS launched a review of the Agency data products. To ensure the quality of data releases, in 2013 ERS solicited review and feedback on its recently launched Application Programming interfaces (APIs) from a group of outside experts. ERS participated, along with NIH's Pillbox Campaign and GSA's USASearch in this pilot program, led by GSA's Digital Services Innovation Center in support of the Federal Digital Strategy. Following the in-depth review of the APIs by both Government and private experts, ERS improved its offerings based on feedback received. The improved APIs were featured at the G8 Conference on Open Agricultural Data, as a step toward opening information from agriculture and making it more accessible/usable.

ERS underwent a tri-annual certification and accreditation by an external contractor for an Authority to Operate (ATO) its information systems in accordance with the Federal Information Securit y Management Act (FISMA), which appears as Title III of the E-Government Act of 2002. The tri-annual certification was completed in April 2013. The accreditation process evaluated information technology (IT) systems against specific documented security requirements, verified the existence of acceptable levels of security controls, summarized residual risks, and involved senior management, system owners, and authorizing officials in the security lifecycle of ERS' IT system. After reviewing the results of the security assessment of the LAN/WAN System and its constituent system - level components, and the supporting evidence provided in the associated security accreditation package, it was determined that the risk to agency operations, agency assets, or individuals resulting from the operation of the information system is acceptable. Accordingly, an authorization to operate the information system in its existing operating environment was granted. The information system was accredited without any significant restrictions

or limitations. This security accreditation constitutes a formal declaration that adequate security controls have been implemented in the information system and that a satisfactory level of security is present in the system. The authority to operate will be effective through December 18, 2015. In addition, ERS will be contracting with a third party each year to perform the Independent Verification and Validation services in order to maintain compliance with USDA's Risk Management Framework and Continuous Monitoring. ERS is required to perform an annual assessment, reviewing the assigned 1/3 National Institute of Standards and Technology (NIST) controls for each fiscal year. Successful completion of the annual Continuous Monitoring will prepare ERS for a renewal of the Authority to Operate in 2015.

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

Item	2012 Actual		2013 Actual		2014 Estimate		2015 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Salaries and Expenses:								
Discretionary Appropriations	$77,723	374	$77,397	348	$78,058	369	$83,446	364
Rescission	0	-	-2,096	-	-	-	-	-
Sequestration			-3,910					
Adjusted Appropriation	77,723	374	71,391	348	78,058	369	83,446	364
Lapsing Balances	-547	-	-378	-	-	-	-	-
Obligations	77,176	374	71,013	348	78,058	369	83,446	364
Obligations under other USDA appropriations:								
Foreign Agricultural Service	248	1	240	1	570	1	500	1
Social Security Administration	55	-	0	-	0	-	-	-
Food and Nutrition Service	1,500	-	2,994	-	2,000	-	2,000	-
National Science Foundation	25	-	0	-	0	-	-	-
Agricultural Research Service	58	-	337	-	0	-	-	-
Office of the Chief Economist	204	-	0	-	0	-	-	-
Nat'l Inst.of Food and Agriculture	3	-	1	-	0	-	-	-
U.S. Int'l Trade Commission	25	-	0	-	0	-	-	-
Internal Revenue Service	10	-	0	-	0	-	-	-
Nat'l Agricultural Statistics Svc	61	-	51	-	101	-	101	-
Risk Management Agency	-	-	1	-	5	-	-	-
Total, Other USDA Appropriation	2,189	1	3,624	1	2,676	1	2,601	1
Total, Economic Research Service	79,365	375	74,637	349	80,734	370	86,047	365

Permanent Positions by Grade and Staff Year Summary

Grade	2012 Actual Washington DC	2013 Actual Washington DC	2014 Estimate Washington DC	2015 Estimate Washington DC
Senior Executive Service	6	6	6	6
GS-15	71	71	71	70
GS-14	78	78	78	77
GS-13	89	89	89	87
GS-12	52	52	52	51
GS-11	34	34	34	34
GS-10	1	1	1	1
GS-9	15	15	15	15
GS-8	5	5	4	4
GS-7	4	4	3	3
GS-6	3	3	3	3
GS-5	4	4	4	4
GS-4	7	7	4	4
GS-3	4	4	4	4
GS-2	2	2	2	2
Total Permanent Positions	375	375	370	365
Unfilled Positions, EOY	-33	-48	0	0
Total Permanent, Full-Time Employment, EOY	342	327	370	365
Staff-Year Estimate	375	349	370	365

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

Salaries and Expenses:

For necessary expenses of the Economic Research Service, [$78,058,000] $83,446,000.

Lead-Off Tabular Statement

SALARIES AND EXPENSES

Budget Estimate, 2015	$83,446,000
2014 Enacted	78,058,000
Change in Appropriation	+5,388,000

Summary of Increases and Decreases
(Dollars in thousands)

Discretionary Appropriations:	2012 Actual	2013 Change	2014 Change	2015 Change	2015 Estimate
Research Innovation for Improving Policy Effectiveness	-	-	+$2,500	+$1,000	$3,500
Food Assistance and Nutrition Research Program	$3,408	-$300	+300	-	3,408
Commodity Outlook Programs	4,717	-500	+500	-	4,717
IT equipment	1,275	-275	-	-	1,000
Macroeconomic analysis	200	-110	+110	-	200
Intramural research on the economics of invasive species	835	-335	+335	-	835
Situation and outlook reporting for fertilizer use and trade	450	-	-	-450	-
Staff streamlining in ERS situation and outlook program	1,000	-	-	-	1,000
Cooperative Agreements and Collaborations	3,681	-970	+133	-	2,844
Interagency Agreements	5,529	-439	+69	-	5,159
Environmental Services	1,105	-405	+405	-500	605
Consumer Data Information Program	5,966	-500	+500	-966	5,000
Agricultural Resource Management Survey (ARMS)	8,000	-1,350	-	-	6,650
Homeland Security	934	-77	+77	-	934
Decentralized GSA and security payments	-	-	-	+7,727	7,727
Pay costs	-	-	+448	+504	952
Other Ongoing Research	40,623	-1,071	+1,290	-1,927	38,915
Total Appropriation or Change	77,723	-6,332	+6,667	+5,388	83,446

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

	2012 Actual		2013 Actual		2014 Estimate		Inc. or Dec.		2015 Estimate	
Program	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Appropriations:										
Economic Analysis & Research	$76,789	368	$70,534	342	$77,124	363	+$5,388	-5	$82,512	358
Homeland Security	934	6	857	6	934	6	-	-	934	6
Total Adjusted Appropriations	77,723	374	71,391	348	78,058	369	+5,388	-5	83,446	364
Rescission	-	-	+2,096	-	-	-	-	-	-	-
Sequestration	-	-	+3,910	-	-	-		-	-	-
Total Appropriation	77,723	374	77,397	348	78,058	369	+5,388	-5	83,446	364
Rescission	-	-	-2,096	-	-	-	-	-	-	-
Sequestration	-	-	-3,910	-	-	-	-	-	-	-
Total Available	77,723	374	71,391	348	78,058	369	+5,388	-5	83,446	364
Lapsing Balances	-547	-	-378	-	-	-	-	-	-	-
Total Obligations	77,176	374	71,013	348	78,058	369	+5,388	-5	83,446	364

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

	2012 Actual		2013 Actual		2014 Estimate		Inc. or Dec.		2015 Estimate	
Program	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Obligations:										
Economic Analysis & Research	$76,242	368	$70,156	342	$77,124	363	+$5,388	-5	$82,512	358
Homeland Security	934	6	857	6	934	6		-	934	6
Total Obligations	77,176	374	71,013	348	78,058	369	+$5,388	-5	83,446	364
Lapsing Balances	+547	-	+378	-	-	-	-	-	-	-
Total Available	77,723	374	71,391	348	78,058	369	+$5,388	-5	83,446	364
Rescission	-	-	+2,096	-	-	-	-	-	-	-
Sequestration	-	-	+3,910	-	-	-	-	-	-	-
Total Appropriation	77,723	374	77,397	348	78,058	369	+5,388	-5	83,446	364

Justification of Increases and Decreases

The Economic Research Service provides economic and other social science research and analysis to inform public and private decision making on agriculture, food, natural resources, and rural America. The Agency's mission is to anticipate food, agricultural, environmental, and rural development issues that are on the horizon, and to conduct sound, peer-reviewed economic research on these issues. ERS is also the primary source of statistical indicators that, among other things, gauge the health of the farm sector (including farm income estimates and projections), assess the current and expected performance of the agricultural sector (including trade), and provide measures of food security here and abroad. Most of the Agency's research is conducted by economists and social scientists through an intramural program of research, market outlook, and analysis. ERS provides evidence-based policy relevant findings through its statistics, indicators, and research that inform USDA decision making.

ERS's base funds will be used to maintain and strengthen its existing research program, including in-depth research reports, quick turn-around staff analyses for USDA and other government decision makers, and user-friendly data products. This three-part research program depends on a broad base of foundational data systems, market analysis, and model development, which are also included in base fund outlays.

Some key evidence of the value of our foundational work includes our commodity market research and outlook program that provides public and private decision makers with an understanding of market developments and trends and the performance of domestic and international agricultural markets, including commodity futures markets. Our national estimate of food deserts in our *Food Access Research Atlas* maps low-income areas with limited access to supermarkets, and helps identify new opportunities for business and employment. Industry can use this to identify underserved communities for new store locations, and health and nutrition researchers can use it to investigate the impact of food access and the food environment on food choices and health outcomes. Finally, ERS's Atlas of Rural and Small-Town America helps State and local decision makers pinpoint the needs of particular areas, recognize the diversity of such areas, and develop strategies to build on the assets of these areas by using location-based data.

The FY 2015 budget request of $83,446,000 continues to fund ERS' highest priority core programs of research, data analysis, and market outlook; and in addition, augments the 2014 program enhancement, *Research Innovations for Improving Policy Effectiveness*, which is directly related to mission area goals and reflects key Administration priorities. The funding change is requested for the following items:

(1) A net increase of $5,388,000 for economic analysis and research, consisting of:

(a) An increase of $1,000,000 ($2,500,000 available in 2014) for *Research Innovations to Improve Policy Effectiveness*.

Overview

ERS received funding for its FY 2014 initiative, *Research Innovations for Improving Policy Effectiveness*, that will strengthen its ability to conduct 21st-century research that supports improving USDA policy effectiveness in a time of tight federal budgets. The initiative adopts two innovative strategies—the use of behavioral economics and the statistical use of administrative data that is collected for programmatic or regulatory purposes—to address critical information gaps that hinder policy effectiveness. In FY 2015, ERS will expand internal expertise, support collaboration with USDA program agencies, and form partnerships with extramural researchers to: (1) fund experiments that incorporate concepts from behavioral economics, identifying high (and low) performing options without the costs associated with new program implementation; and (2) create and evaluate unique merged administrative data systems by linking multiple sources, assessing statistical properties, and analyzing the merged data for policy-relevant research. Results of the initiative will provide science-based evidence that informs decision making by policy makers and program managers in the Congress, USDA and across Federal and State governments. The initiative supports the priorities, goals and objectives of the REE Action Plan.

ERS will provide support for the implementation of behavioral and experimental methods within USDA. This research effort will help USDA respond to the President's recent call to use "experimentation and innovation to

test new approaches to program delivery." Behavioral and experimental insights can directly improve program implementation in all USDA program agencies, as well as provide them with tangible evidence for the Government Performance and Results Act reporting process and budgetary requests. Partnerships will be established with agencies to identify policy issues for collaboration using new methods to be developed, as well as to incorporate experiments into program implementation. Collaborative efforts and partnerships with the Food and Nutrition Service (FNS), the Farm Service Agency (FSA), and the National Resources Conservation Service (NRCS) will be expanded. New partnerships will be explored with RMA and FS, among others.

For statistical use of administrative data, ERS will work with other principal statistical agencies, including Census, the Bureau of Labor Statistics, the Bureau of Economic Analysis, and the National Center for Health Statistics using already-existing data collection systems to combine administrative data and other information from disparate sources to maximize data research value.

Justification
This initiative will strengthen the research foundation for evidence policy and will provide science-based evidence that will inform decision making by policymakers and program managers in the Congress, USDA, and across Federal and State governments.

Applying Behavioral Economics to Policy Design. USDA agencies face the complex policy challenge of developing program options that influence participation choices and improve program effectiveness in the face of declining agency budgets. They also face incomplete information on the effects of program features on participation and performance measures. For example, USDA provides incentives for farmers to adopt conservation practices, yet many farmers do not participate. USDA subsidizes nutritious school meals, yet many children choose less healthy options. ERS will apply more behavioral economics research to nutrition and other USDA program design issues, including incorporating market-based elements and low-cost behavioral "nudges" to enhance conservation program efficiency and effectiveness, piloting environmental markets, and examining practical and inexpensive changes to the school meals environment to encourage healthier choices. Examples of research to be conducted include:

Reducing child obesity through healthier products and more nutritious school meals. Expanding child nutrition programs will add to the evidence base and help identify successful innovations for schools to adopt. A full-fledged analysis that examines the intervention's effect on what children *actually eat* would collect (at least) a full day of dietary intake data — not merely how much of various foods disappear from the school meal serving line (which is easily measured). This more in-depth analysis would help FNS better evaluate the benefits of nutrition-improving changes to school meals.

Policy design of environmental markets and farmer participation. New experiments designed in partnership with USDA program agencies will investigate the design of environmental markets and the interactions between environmental markets and conservation programs, providing evidence on promoting environmental quality at the lowest possible cost. This information will feed directly into NRCS and FSA efforts to document and enhance conservation program benefits.

Using Administrative Data for Statistical Analysis of USDA Programs. Another set of policy challenges involves information gaps in the scope and the determinants of participation in USDA programs in four areas—commodity support, food and nutrition assistance, food safety, and resource conservation—that hinder policy effectiveness and can be addressed at relatively low cost using administrative data. Administrative data is a highly reliable and relatively low-cost source of information on the amount of benefits provided to each program participant and the dynamics of program participation; they are often the only source of that information. This offer develops ERS's capacity to use, link, and apply administrative data for research and evidence-based program evaluation in conservation programs, farm safety net programs, and the SNAP program. Examples of research to be conducted include:

An analysis of farm safety net programs. Understanding farmer decisions about whether to participate in one or more USDA risk management programs would support designing a cost-effective safety net that aligns with

farmers' incentives. The research findings would support reducing potential costly program overlap.

Interactions between SNAP and other safety net programs during recession and recovery. The research links State-level administrative data for the Supplemental Nutrition Assistance Program (SNAP) — the largest of USDA's programs — and other safety net programs, especially Unemployment Insurance, to better understand how families turn to a variety of programs to obtain nutrition and financial support. Results can illuminate options for improved coordination and provision of services at the State and local level, and may allow for better and more efficient targeting of program delivery.

Benefits for All Americans:
This initiative allows USDA to take a leadership role at the frontier of behavioral and experimental economics methods. The findings from these types of studies can be more directly implemented given the nature of design and questions addressed.

For example, ERS-supported research on the USDA school meals programs from 2011 to 2013 used behavioral economics methods, and found that creating a "healthy express" school lunch line significantly increased sales of these items and decreased sales of unhealthy foods, with potential for improving child health and reducing childhood obesity. Programs based on this finding have begun to be implemented across the country.

Ongoing ERS research using administrative data explores the connection between SNAP and Unemployment Insurance, two key pieces of the U.S. safety net, whose importance in helping stabilize the economy were evident during the most recent recession.

(b) An increase of $7,727,000 for decentralized GSA and Security payments.

USDA proposes in FY 2015 the full decentralization of GSA Rental Payments and DHS payments. The appropriations request for the central GSA rent account and the DHS payment account has been reduced accordingly.

(c) An increase of $504,000 for pay costs ($122,000 for annualization of the 2014 pay increase and $382,000 for the 2015 pay increase).

This increase will enable ERS to maintain staffing levels, which are critical to conducting research within ERS' highest priority programs.

(d) A decrease of $500,000 for Environmental Services.

ERS will continue to support research that informs development of markets for environmental services through the initiative, *Research Innovations to Improve Policy Effectiveness*, but will reduce the funding level of the broader Environmental Services program in order to redirect funds to expand research using behavioral economics and other higher priority research areas in FY 2015.

(e) A decrease of $966,000 ($5,966,000 available in 2014) for the Consumer Data Information Program .

ERS will reduce the funding level of its Consumer Data Information Program (CDIP) in order to redirect funds to support the requirement for the decentralized GSA rent and DHS security payments. Remaining funds provide support for core research and statistical programs on food market and nutrition issues, but ERS will have less capacity to explore new and emerging issues.

(f) A decrease of $1,927,000 and 5 staff years ($40,842,000 available in 2014) for Other Ongoing Research.

ERS will direct a portion of its core research budget to support the requirement for the decentralized GSA rent and DHS security payments. Programs affected include research on rural and farm-household well-being, food markets, and state level measures of agricultural productivity.

(g) A decrease of $450,000 ($450,000 available in 2014) to eliminate situation and outlook reporting for fertilizer use and trade.

ERS will eliminate situation and outlook reporting for fertilizer use and trade in order to redirect funds to support the FY 2015 pay cost increase.

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

	2012 Actual		2013 Actual		2014 Estimate		2015 Estimate	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Alabama	$6	-	$20	-	-	-	-	-
California	21	-	60	-	-	-	-	-
Colorado	133	-	43	-	-	-	-	-
Connecticut	7	-	-	-	-	-	-	-
District of Columbia	66,063	374	65,105	348	$78,058	369	$83,446	364
Florida	45	-	-	-	-		-	-
Georgia	14	-	-	-	-	-	-	-
Illinois	707	-	1,033	-	-	-	-	-
Indiana	300	-	130	-	-	-	-	-
Iowa	143	-	54	-	-	-	-	-
Kansas	-	-	15	-	-	-	-	-
Kentucky	-	-	250	-	-	-	-	-
Louisiana	48	-	22	-	-	-	-	-
Maryland	4,348	-	923	-	-	-	-	-
Massachusetts	67	-	59	-	-	-	-	-
Michigan	-	-	77	-	-	-	-	-
Minnesota	175	-	91	-	-	-	-	-
Mississippi	560	-	250	-	-	-	-	-
Missouri	348	-	137	-	-	-	-	-
Montana	6	-	-	-	-	-	-	-
Nebraska	3	-	-	-	-	-	-	-
New Jersey	622	-	249	-	-	-	-	-
New Mexico	97	-	13	-	-	-	-	-
New York	976	-	554	-	-	-	-	-
North Carolina	119	-	415	-	-	-	-	-
North Dakota	-	-	100	-	-	-	-	-
Ohio	-	-	20	-	-	-	-	-
Oklahoma	25	-	30	-	-	-	-	-
Oregon	-	-	81	-	-	-	-	-
Pennsylvania	55	-	67	-	-	-	-	-
Rhode Island	20	-	-	-	-	-	-	-
South Dakota	20	-	45	-	-	-	-	-
Tennessee	4	-	4	-	-	-	-	-
Texas	100	-	199	-	-	-	-	-
Utah	120	-	-	-	-	-	-	-
Vermont	22	-	-	-	-	-	-	-
Virginia	866	-	564	-	-	-	-	-
Washington	95	-	35	-	-	-	-	-
Wisconsin	500	-	319	-	-	-	-	-
Argentina	15	-	25	-	-	-	-	-
Australia	4	-	20	-	-	-	-	-
British Columbia	13	-	-	-	-	-	-	-
China	25	-	-	-	-	-	-	-
France	3	-	-	-	-	-	-	-
India	281	-	-	-	-	-	-	-
Syria	200	-	-	-	-	-	-	-
United Kingdom	-	-	4	-	-	-	-	-
Obligations	77,176	374	71,013	348	78,058	369	83,446	364
Lapsing balances	547	-	378	-	-	-	-	-
Total Available	77,723	374	71,391	348	78,058	369	83,446	364

Note: The distribution of 2014 and 2015 funds by State has not been determined at this time.

ECONOMIC RESEARCH SERVICE

Classification by Objects
(Dollars in thousands)

		2012 Actual	2013 Actual	2014 Estimate	2015 Estimate
Personnel Compensation:					
Washington, D.C.					
11	Total personnel compensation……..	$39,396	$36,543	$39,091	$38,926
12	Personnel benefits…….	10,101	10,018	10,707	10,661
	Total personnel comp.and benefits….....	49,497	46,561	49,798	49,587
Other Objects:					
21.0	Travel and transportation of persons……	319	281	478	478
22.0	Transportation of things……	5	12	19	19
23.1	Decentralized GSA and DHS payments……	0	0	0	6,507
23.3	Communications, utilities, & misc. charges…	630	544	540	540
24.0	Printing and reproduction……	54	65	54	54
25.1	Interagency Agreements…….	5,529	5,090	6,009	5,659
25.2	Other Services……	1,487	1,510	1,500	1,500
25.3	DHS payments…….	0	0	0	1,220
25.4	Contracts……	2,735	3,436	3,000	2,700
25.5	Cooperative Agreements……..	3,681	2,711	4,494	4,323
25.7	Data acquisition……..	9,791	8,319	9,416	8,109
26.0	Supplies and materials……	897	264	500	500
26.3	ADP software/material/supplies…….	1,236	1,262	1,000	1,000
31.0	Equipment……	245	408	450	450
41.0	Grants……	1,070	550	800	800
	Total, Other Objects……..	27,679	24,452	28,260	33,859
99.9	Total, new obligations…….	77,176	71,013	78,058	83,446
Position Data:					
Average Salary (dollars), ES positions……		$171,323	$170,984	$170,984	$170,984
Average Salary (dollars), GS positions……		$109,191	$110,819	$111,706	$112,600
Average Grade, GS positions……		12.6	12.5	12.5	12.5

Shared Funding Projects
(Dollars in thousands)

	2012 Actual	2013 Actual	2014 Estimate	2015 Estimate
Working Capital Fund:				
Adminstration:				
Beltsville Service Center	$59	$46	$56	$57
Mail and Reproduction Management	90	95	89	102
Integrated Procurement System	21	28	28	29
Procurement Operations	-	1	1	1
Subtotal	170	170	173	189
Communications:				
Creative Media & Broadcast Center	5	65	127	116
Finance and Management:				
NFC/USDA	68	85	100	98
Controller Operations	234	222	43	43
Financial Systems	57	60	55	55
Subtotal	358	368	198	196
Information Technology:				
NITC/USDA	294	283	81	81
International Technology Services	-	5	-	-
Telecommunications Services	362	397	415	399
Subtotal	655	685	496	481
Correspondence Management	9	9	8	10
Total, Working Capital Fund	1,197	1,298	1,003	991
Department-Wide Reimbursable Programs:				
1890's USDA Initiatives	12	11	11	11
Advisory Committee Liason Services	3	2	2	2
Continuity of Operations Planning	7	7	8	8
E-GOV Initiatives HSPD-12	24	24	25	25
Emergency Operations Center	9	8	8	8
Facility and Infrastructure Review and Assessment	0	2	2	2
Faith-Based Initiatives and Neighborhood Partnerships	2	1	1	1
Federal Biobased Products Preffered Procurement Program	1	1	1	1
Hispanic-Serving Institutions National Program	8	7	7	7
Honor Awards	0	0	0	0
Human Resources Transformation (inc. Diversity Council)	6	6	6	6
Intertribal Technical Assistance Network	7	-	-	-
Medical Services	12	13	14	14
Personnel and Document Security	5	10	11	11
Pre-authorizing Funding	13	12	14	14
Retirement Processor/Web Application	2	2	2	2
Sign Language Interpreter Services	31	35	37	37
TARGET Center	3	3	3	3
USDA 1994 Program	3	3	3	3
Virtual University	8	7	8	8
Visitor Information Center/People's Garden	3	3	4	4
Total, Department-Wide Reimbursable Programs	158	159	166	166
E-Gov:				
Budget Formulation and Execution Line of Business	0	0	0	0
Enterprise Human Resources Integration	11	9	8	8
E-Rulemaking	-	-	4	4

Shared Funding Projects
(Dollars in thousands)

	2012 Actual	2013 Actual	2014 Estimate	2015 Estimate
E-Training	9	8	10	10
Financial Management Line of Business	0	1	1	1
Geospatial Line of Business	-	0	-	-
Grants.gov	2	3	2	2
Human Resources Line of Business	1	1	1	1
Integrated Acquisition Environment - Loans and Grants	5	5	7	7
Integrated Acquisition Environment	2	2	2	2
Total, E-Gov	31	30	36	36
Agency Total	1,385	1,486	1,205	1,193

STATUS OF PROGRAM

Economic Research and Analysis Program

Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.

Current Activities:

ERS research explores how investments in rural people, business, and communities affect the capacity of rural economies to prosper in the new and changing global marketplace. The agency analyzes how demographic trends, employment opportunities and job training, Federal policies, and public investment in infrastructure and technology enhance economic opportunity and quality of life for rural Americans. Equally important is ERS's commitment to help enhance the quality of life for the Nation's small farmers who increasingly depend on these rural economies for employment and economic support.

ERS continues to monitor changing economic and demographic trends in rural America, particularly the implications of these changes for the employment, education, income, and housing patterns of low-income rural populations. The rural development process is complex and sensitive to a wide range of factors that, to a large extent, are unique to each rural community. Nonetheless, ERS assesses general approaches to development to determine when, where, and under what circumstances rural development strategies will be most successful.

ERS research and analysis provide insight into market conditions facing U.S. agriculture, avenues for innovation, and market expansion to help farmers and ranchers manage risk. ERS produces USDA's estimates of farm income. In addition, the ERS program identifies and analyzes market structure and technological developments that affect efficiency and profitability.

Selected Examples of Recent Progress:

ERS research on the farm and rural economy found the following:

- *Large shifts in the supply of foreign-born, hired farm labor resulting from substantial changes in U.S. immigration laws or policies could have significant economic implications.* ERS tracks key demographic and economic trends for hired farm workers, and the importance of international migration to the size and composition of the U.S. farm labor population. Research continued to update a model of the U.S. economy used to evaluate how changes in the supply of foreign-born labor might affect agricultural output and exports, wages, employment, and national income, and to improve the model's relevance to current immigration policy proposals. Findings from the model and analysis were used in briefings to support decision making on immigration policy and were incorporated into a Federal Government report on the benefits of international migration for agriculture and rural communities.

- *Since the start of 2001 net job growth in non-metro America has been near zero. This stagnation in job growth overlaps with the first recorded period of non-metro population loss, between 2010 and 2012.* The ERS report *Rural America at a Glance, 2013 Edition,* is one in an annual series highlighting the most recent indicators of social and economic conditions in rural areas. This year's edition reports on the lower rates of growth in rural unemployment compared with urban employment despite similar declines in unemployment; the rise in wage inequality both within the rural workforce and between urban and rural workers; a 30-percent increase in the number of rural counties with poverty rates exceeding 20 percent; and negative rural population growth since 2010. Several major newspaper and online media outlets have reported on the key findings.

- *Rural veterans enhance the vitality of the rural economy.* Nearly four million veterans reside in rural America, over 10 percent of the adult population, according to a recent ERS report, *Rural Veterans at a Glance*. The rural veteran population is older on average than the rural adult population as a whole, and the

share of women and racial/ethnic minorities among the veteran population is increasing. Although some rural veterans face employment obstacles due to health issues, they tend to have more education and higher incomes than their nonveteran peers, and are more likely to work in higher-skill industries such as professional and business services, transportation and utilities, and manufacturing. ERS analysis and data support the Department's outreach efforts to rural veterans and new farmers and ranchers.

- *The share of U.S. farms operated by women nearly tripled over the past three decades, from five percent in 1978 to fourteen percent by 2007.* An ERS report published in May, 2013 finds that while most farms operated by women are very small, the number of women-operated farms increased in all sales classes. There were 15,400 women-operated farms with sales of at least $100,000, and 4,300 with sales of $500,000 or more. Nearly half of the sales from women-operated farms come from two commodity classes: specialty crops (fruits, vegetable, melons, nuts) and poultry and eggs. Aside from specialty crops, most sales were concentrated in livestock sectors. Women are the primary operator on one in seven U.S. farms. About one million women are primary or secondary farm operators, or 30 percent of all farm operators. ERS provided briefings on findings to support decision making, and findings were cited in multiple newspaper, radio, and blog stories.

ERS research and analysis of U.S. agricultural markets found the following:

- *Between 1982 and 2007, production and cropland shifted to larger farms.* An ERS report found that the shift was ubiquitous across states and commodities, persistent over time, and large, centering around a doubling of farm size over the entire period. Larger crop farms continue to realize better financial performance primarily by utilizing labor and capital more intensively. The long-term shifts in farm size have been accompanied by greater specialization, and a greater use of contracting. Technology has also played a major role in driving increases in farm size by allowing a single farmer to operate and manage more acres. Nonetheless family farms continue to dominate crop agriculture. In 2011, 96 percent of U.S. crop farms were family farms, and they accounted for 87 percent of the value of crop production. These findings have been reported in the media, and will feature in forthcoming articles. The measures developed in the study are being applied to farm data for Canada, Brazil, Japan, and the European Union for a broad comparative study of farm structure being carried out by the Organisation for Economic Cooperation and Development.

- *Beginning farmers and ranchers have declined as a share of all farmers over the last two decades.* An ERS report published in March, 2013, *Beginning Farmers and Ranchers at a Glance*, finds that beginning farmers and ranchers have declined as a share of all farmers and that their average age has risen to 49 compared with an average of 60 for established farmers. They tend to operate smaller farms and are more likely to work off the farm than established operators. Beginning farmers often report that their biggest challenge in getting started in farming is to access enough capital and farmland to operate at a profitable size. The economic brief informed a suite of activities in this research area, including a workshop, "Transitions in Agriculture: Implications for Research, Data Development, and Analysis," that focused attention on issues related to the transfer of the farm to next generation of farmers. Findings from the report and workshop were used in several interagency briefings and directly supported a Departmental initiative to expand opportunities to help beginning farmers and ranchers succeed in agriculture.

- *The number of hog farms is falling, and farms are increasingly specialized.* The number of hog farms fell by more than 70 percent from 1992 to 2009, while the total hog inventory remained stable. The average hog farm grew from 945 head of hogs sold or removed under contract in 1992 to 8,389 head in 2009. The industry's organization also evolved toward farms that specialized in a single stage of hog production, usually under contract with integrators. An ERS report assessed the structural change and analyzed the impacts on productivity, prices, and environmental performance. Substantial productivity gains for hog farms since 1992 were attributable to increases in the scale of production and technological innovation. The increased size of operations accounted for almost half of the total increase in hog farm productivity since 1992. Productivity gains in hog production have benefited U.S. consumers in terms of lower pork prices, and enhanced the competitive position of U.S. producers in international markets. However, the era

of dramatic productivity growth in hog production from 1992 to 2009 will likely remain unmatched, absent significant technological innovation. The gains from exploiting scale economies are nearly exhausted, and the measurable technological and organizational innovations contributing to productivity growth are now widely diffused. This research was widely cited in the farm industry press and social media.

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- *New models assessed the impacts of high temperatures and drought on corn and soybean production in 2012, and increase understanding of the impacts of new technologies and production practices on long-term yield projections.* New ERS models provide a significant analytical enhancement to a simple trend yield approach frequently used for yield forecasting. Because of the timeliness of this analysis following the 2012 drought and its importance in the Department's short-term and baseline projections, it was presented at the February, 2012 USDA Agricultural Outlook Forum in February. The findings have also been widely reported in the industry press.

- *The failure of many corn, soybean, and wheat futures contracts to converge to delivery market cash prices over the 2005 – 2010 period of time was attributable to inconsistent storage rates for the physical commodity rather than "excessive speculation."* The sustained period of non-convergence, as well as its magnitude, was unprecedented in domestic commodity markets and appeared to simultaneously imply different prices for the same grain, creating market uncertainty. This was a cause of concern for many market participants, policymakers, and economists, who worried that convergence failures signaled a weakening of the traditional price discovery and risk management roles of futures markets. The report's findings helped to inform the debate about the need for changes under the Dodd-Frank Wall Street Reform and Consumer Protection Act to promote transparency in commodity markets.

- *Slaughter and processing options affect markets for locally sourced meat.* An ERS report published in June, 2013 evaluated the availability of slaughter and processing facilities for local meat production and the extent to which these may constrain or support growth in demand for locally sourced meats. A majority of livestock in the United States are processed at a relatively small number of large-volume plants. However, these plants, even if conveniently located, are essentially unavailable to local meat processors due to mismatches in scale, services, and business models. The report provided decision makers with information on the challenges and obstacles to meat producers seeking entry to or expansion in local markets.

- *USDA Agricultural Projections to 2022 suggest long run increases in consumption, trade, and prices.* Each year ERS coordinates the Department's Baseline projections for U.S. and world agriculture for the coming decade. The 2012 report found that following reductions from projected record levels in 2013, farm cash receipts and the value of U.S. agricultural exports are predicted to grow beyond 2015. The analysis also predicts that U.S. retail food price increases will average less than the overall rate of inflation in 2014-2022, largely reflecting higher livestock production that limits consumer meat price increases. The estimates in this report are incorporated into USDA's submission for the President's 2013 Budget, and support the Farm Service Agency's estimation of budget costs for farm program commodities. Beyond its importance for USDA's policymakers, the annual Baseline projections report and database is an essential reference for public and private decision makers, and receives over 100,000 page views annually on the ERS website.

- *Wide variation in wheat production costs across the country reflects differences in yields, cropping practices, and costs of land, labor, and capital assets.* Wheat is the third largest U.S. crop in terms of both value and acreage, but unlike most other crops it has distinct varieties that are produced in different regions or over different seasons. The result is wide variation in the costs of wheat production across growing areas, inherent in the diversity of inputs and production practices. ERS analysis of a 2009 survey of costs and returns indicates that the North Central and Northern Plains regions had the lowest and highest per bushel costs, respectively. The two cost items that accounted for much of the regional differences in total production costs were machinery and fertilizer. These costs can affect the competitiveness of wheat with other crops in each region and the profitability of planting wheat relative to alternatives such as corn and soybeans. The U.S. is still a major wheat-producing country, with output exceeded only by China, the European Union and India. ERS analysis indicates that planted acreage in the U.S. has declined as a share

of total acreage since the 1980s, particularly in the Central Plains.

- *U.S. beef markets are undergoing rapid change as alternative production systems evolve in response to consumer demands and compete with conventional grain-fed beef production.* ERS research finds that beef products from alternative production systems likely account for more than three percent of the market, with estimated annual growth rates at 20 percent. Continued growth at current rates could double market shares for these products every five years, although it is unlikely that such growth will continue beyond a certain threshold. As supplies of beef from alternative production systems increase to meet and exceed demand for organic, grass-fed, natural, or local beef, current premiums will likely decline. As a result of declining relative prices and unless costs decline as well, profit margins for alternative beef products will likely narrow. The sustainability of each of these alternative beef production systems, including economic sustainability, will be determined as consumers assess and establish the value of various product attributes. Representatives from both industry and mainstream media contacted the authors for background information and the report's findings on trends in alternative beef production systems.

- *Farmers are adapting to rising energy prices.* An ERS report published in May, 2013, *Agriculture's Supply and Demand for Energy and Energy Products*, examined both sector and farm-level responses to changing market and policy drivers such as the increased production of biofuel crops and other sources of renewable energy, together with changes in production practices to economize on energy-based inputs like fertilizer. The report finds that farmers have adapted to rising energy prices and evolving policies by adjusting their use of energy-based agricultural inputs, altering energy-intensive production practices, and growing more energy-feedstock crops. This report was cited in agriculture-related blogs and websites.

Goal 2: Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.

Current Activities:

The ERS climate change research program develops models and other analytical techniques to predict responses of farmers to greenhouse gas mitigation options, analyze the impact of mitigation options on domestic and global agricultural markets and land and water use, and evaluate adaptation by farmers to a new climate regime through use of alternative technologies. The ERS climate change research program builds on extensive expertise on the economics of land use and land management, technology adoption, conservation program design, economics of biofuels, and value and dissemination of public investment in research and development.

In addition, ERS is continuing to contribute to USDA's efforts to improve the science behind Federal environmental, water and air quality regulations and programs. As part of its analysis of environmental regulations and conservation incentive policies, ERS research continues to provide insight into developing policies for controlling nonpoint source pollution. More generally, ERS research analyzes the economic efficiency, environmental effectiveness, and distributional implications of alternative designs of resource, conservation, environmental, and commodity programs and their linkages.

Selected Examples of Recent Progress:

ERS research on climate change found the following:

- *ERS' climate change research examines the economic, environmental, and land use implications of farmer and market responses to climate change.* In 2013, ERS was a lead contributor to a USDA report on "Climate Change and Agriculture in the United States: Effects and Adaptation" as well as the Third National Climate Assessment Report. One of the key findings often overlooked in the literature is that climate change will likely exacerbate current biotic stresses on agricultural plants and animals. Resulting changes in weed, disease, and insect pressures, together with changes in pollinator lifecycles, will affect plant growth and yield independent from climate change's impacts through average temperature and rainfall. ERS' global climate change model development has benefited from collaboration in the international Agricultural Model Inter-comparison and Improvement Project (AgMIP) over the years,

culminating this year in a series of five forthcoming peer reviewed journal articles coauthored by ERS researchers that highlight the resource implications of climate change given changes in other drivers of agricultural supply and demand over the next 40 years. One of the findings of this collaborative effort is that world consumption of major field crops declines slightly across a range of climate-induced productivity shocks and types of economic models. Continuing refinement of climate change models was the goal of a joint 2013 workshop ERS sponsored with AgMIP focusing on integrating water scarcity into future agricultural assessments. In a similar vein, ERS held a workshop on "Economics of Markets for Agricultural Greenhouse Gases" to help develop a collaborative research community to create information systems, analyses, and integrated modeling systems designed to help inform key climate policy decisions.

- *A significant reason farmers participate in USDA conservation programs is to help mitigate risks from drought.* Programs like the Conservation Reserve Program and Environmental Quality Incentives Payments play an important role in drought preparedness and climate adaptation even if they do not directly target such activities. If climate change increases drought risk, this may lead to increased demand from farmers to participate in these programs. In a related activity, ERS co-sponsored, with the Office of the Chief Economist, a roundtable discussion of approximately 60 experts and stakeholders to share experiences and lessons learned from the 2012 drought. The roundtable was a premier Department-wide deliverable for the Secretary for addressing the climate change priority area.

ERS research on conservation, water, and environmental issues found the following:

- *Conservation payments improve environmental quality only if they support actions that would not have been adopted without the payment*. Additionality is achieved when a conservation payment causes a change in conservation practice adoption, agricultural input use, or land use, and therefore improves environmental quality. ERS research shows that roughly 80 percent of farmers who received cost-sharing for a structural conservation practice (riparian buffers and grassed waterways, for example) would not have adopted the practice without the payment. These practices are often expensive to install and on-farm benefits are limited or occur only in the distant future. The research also shows that almost 50 percent of producers who received an incentive payment for conservation tillage would be using conservation tillage even without the payment. Conservation tillage is often adopted without payments because it can reduce costs and may increase profit. Preliminary results are detailed in the *Journal of Soil and Water Conservation*. ERS researchers have also briefed the Natural Resource Conservation Service.

Goal 3: Help America promote agricultural production and biotechnology exports as America works to increase food security.

Current Activities:

ERS conducts research on technological innovation in agriculture, the economic performance, structure and viability of the farm sector and of different types of farms, and the state of global food security. ERS effectively communicates research findings to policy makers, program managers, and those shaping the public debate. The research program identifies key economic issues and uses sound analytical techniques to understand the immediate and broader economic and social consequences of alternative policies and programs related to the sustainability and use of biotechnology in U.S. agriculture, including policies to promote trade of U.S. products.

ERS has a broad program of work examining the production and marketing characteristics of the U.S. organic sector. Ongoing activities include research on the adoption of certified organic farming systems across the U.S., analysis of consumer demand and prices in specific markets, and several nationwide surveys of organic producers and markets.

The ERS research program includes an ongoing assessment of global food security. ERS provides research, analysis, and information on food security, including factors affecting food production and ability to import food, in Africa, Asia, Latin America and the Caribbean, and the Commonwealth of Independent States to decision makers in

the United States and throughout the world. An annual report provides an up-to-date assessment of global food security.

Selected Examples of Recent Progress:

ERS research on technological innovation and investment found the following:

- *Globally, investment in agricultural research, development and innovation is shifting to developing countries and the private sector.* ERS co-authored a report *ASTI global assessment of agricultural R&D spending* (published by the International Food Policy Research Institute, http://www.ifpri.org/publication/asti-global-assessment-agricultural-rd-spending), which found that for the first time China surpassed the United States to become the global leader in spending on agricultural research and development. The report also showed that private companies increased their share of total spending on food and agricultural research and innovation. ERS also produced an edited volume, *Productivity Growth in Agriculture: An International Perspective,* which found that the global rate of agricultural productivity growth has been accelerating, led by improved performance in developing countries and transition economies, but may be slowing in some industrialized countries. These findings have important implications for future competitiveness of U.S. agriculture. ERS research findings were published in *Science* and have been widely cited in the media.

ERS research on the organic sector found the following:

- *U.S. consumer demand for organically produced goods has grown continuously since USDA established national standards for organic production and processing in 2002*. An ERS article published in October, 2013, *Growth Patterns in the U.S. Organic Industry*, showed that while Americans economized on their food purchases during the 2007-09 recession, including purchases of organic products, growth in demand for organic products rebounded quickly following the recession. Industry analysts estimate that U.S. organic food sales were $28 billion in 2012 (over four percent of total at-home food sales), up 11 percent from 2011. The article also discusses how USDA has begun organic regulation of nonfood agricultural products—for example, laundry detergent with organic coconut oil, Aloe Vera, and other ingredients—which accounted for another $2.2 billion in organic sales in 2011, according to the Organic Trade Association.

- *Growth in organic cropland and pasture and rangeland continues*. According to ERS estimates published on October 24 2013, the U.S. had 3.1 million acres of certified organic cropland in 2011 and 2.3 million acres of certified organic pasture and rangeland, continuing the long-term growth trend in this sector. Certified cropland and pasture dipped between 2008 and 2010 as sluggish growth in consumer demand during the recession dampened the short-term outlook for organic producers. However, the growth in certified acreage of both cropland and pastureland has more than recovered those losses and has reestablished its upward trajectory.

ERS research on global agricultural markets and food security found the following: *China's agricultural subsidies and price supports may actually improve prospects for U.S. agricultural exports by raising the costs and prices of Chinese commodities above international levels*. ERS research has identified China as the most prominent example of a developing country that has transitioned from taxing to supporting agriculture, and examined how World Trade Organization (WTO) commitments shaped its agricultural policies over the last decade. The emergence of agricultural support in developing countries like China poses a challenge to efforts to reduce global distortions in agriculture. ERS research clarifies the linkages between China's national-level strategy and farm-level subsidies and price supports, and explains how these policies have actually increased some U.S. commodity exports to China. The findings were reported in a number of high level briefings to senior policy officials to support decision making.

- *Food insecurity continues to plague the poorest countries in the world.* The USDA publishes the International Food Security Assessment to inform U.S. policymakers as well as international donor organizations of the food security situation in 76 low-and middle-income countries. The report provides

projections of food availability and access—including food gaps and the number of food-insecure people. Findings indicate that the greatest improvement in food security over the next decade will be in Latin America and the Caribbean. Sub-Saharan Africa will continue to be the most food-insecure region. The findings are used to make decisions on funding for U.S. assistance programs by USDA and the U.S. Agency for International Development.

- *Brazil's costs of producing sugar and currency exchange rates are important determinants of global sugar prices, which are projected to exceed historically high levels over the next decade.* Brazil is the world's largest sugar producer and exporter, and its share of global production and trade has increased substantially in recent years. ERS analysis shows that Brazil's sugar production costs determine the long-run price of raw sugar in the world raw sugar market, although there are short- to medium-term deviations from this long-term relationship caused by other factors. Brazil's increasing costs of producing sugar in recent years, attributable to both its growing ethanol use and appreciation of its currency, is driving projections of historically high prices for the commodity in global markets over the next decade. Sustained higher global prices could weaken the case for current policies that support US producers. Alternatively, volatility in exchange rates leading to increased volatility in international sugar prices could strengthen the case for policies that provide a safety net, even if season average prices are forecast to reach historic highs. The results of this analysis were presented in a briefing to senior policy officials.

- *U.S. broiler meat exports are projected to increase about 12 percent over the next decade, due in part to rising demand in price-sensitive developing countries.* ERS has analyzed recent major developments in international poultry trade, including a rapid increase in poultry exports from Brazil and a sharp decrease in imports by Russia. The United States and Brazil, both with a combination of adequate land to produce feed, large internal markets, and strong processing sectors, are expected to remain the major broiler producers and exporters. Nonetheless, low production costs and competitive export prices are reasons why Brazil is expected to continue to be the largest exporter of poultry products and account for most projected growth in global import demand over the next decade. The findings of this report have been reported in industry media outlets.

- *Afghanistan has emerged as one of the world's largest importers of flour, spurred by strong economic growth and a rapidly expanding population that depends on flour for over half of its caloric intake.* ERS research finds that Afghanistan's flour milling industry has been slow to rebuild, in part because of competition from imported flour. Afghanistan's official trade policies, to the extent that they are enforceable along their rugged borders, place flour producers at a disadvantage—the tariff on imported wheat tends to raise operating costs for millers. ERS findings indicate that despite poor infrastructure and war-torn conditions, Afghanistan's wheat and flour markets function reasonably well, are well-integrated across domestic regions, and that private traders have a track record of successfully procuring imported wheat and flour from regional suppliers. ERS' research on Afghanistan's wheat and flour markets under insecure conditions has been of interest to NATO policy advisers given the planned transfer of security responsibilities from coalition forces to domestic authorities.

Goal 4: Ensure that all of America's children have access to safe, nutritious, and balanced meals.

Current Activities:

ERS studies the relationship among the many factors that influence food choices and health outcomes. At the household level, research focuses on food price trends, income, and individual characteristics such as age, race and ethnicity, household structure, knowledge of diet and health, and nutrition education. At the industry level, research focuses on the interaction among firms, consumers, and government programs and policies. Children's food access, food security, and child and adult obesity continue to be important foci of the ERS research program. ERS research into adult and child obesity includes approaches taken from behavioral economics to investigate how biases triggered by psychological mechanisms might contribute to poor dietary choices and obesity.

Through its food assistance and nutrition research and by working closely with USDA's Food and Nutrition Service, ERS studies and analyzes the Nation's nutrition assistance programs. These programs receive substantial Federal

funding and affect the daily lives of millions of America's children. Long-term research themes include dietary and nutritional outcomes, food program targeting and delivery, and program dynamics and administration. ERS research is designed to meet the critical information needs of USDA, Congress, program managers, policy officials, the research community, and the public at large.

ERS food safety research focuses on enhancing methodologies for valuing societal benefits associated with reducing food safety risks, understanding consumer response to food safety incidents, assessing industry incentives to enhance food safety through new technologies and supply chain linkages, and evaluating regulatory options and change. ERS research also investigates the safety of food imports and the efficacy of international food safety policies and practices.

Selected Examples of Recent Progress:

ERS research on food choices and health outcomes showed the following:

- *An estimated 85.5 percent of American households were food secure throughout the entire year in 2012, meaning that they had access at all times to enough food for an active, healthy life for all household members.* The remaining households (14.5 percent) were food insecure at least some time during the year, including 5.7 percent with very low food security—meaning that the food intake of one or more household members was reduced and their eating patterns were disrupted at times during the year—because the household lacked money and other resources for food. Additional research focused specifically on children shows that an estimated 79 percent of households with children were food secure throughout the year in 2011, meaning that all the household members had consistent access to adequate food for active, healthy lives. ERS provided briefings on these research reports and officials and summary findings to support decision making on USDA food assistance and nutrition programs.

- *Updated estimates of distance to supermarkets using 2010 data provide additional measures of food access.* Efforts to encourage Americans to improve their diets and to eat more nutritious foods presume that a wide variety of these foods are accessible to everyone. However, for some Americans and in some communities, access to healthy foods may be limited. Using Census Bureau population data from the 2010 Decennial Census, income and vehicle availability data from the 2006-2010 American Community Survey, and a 2010 directory of supermarkets, ERS research found that that 9.7 percent of the U.S. population, or 29.7 million people, live in low-income areas more than one mile from a supermarket. However, only 1.8 percent of all households lives more than one mile from a supermarket and do not have a vehicle. ERS's *Food Access Research Atlas* (http://www.ers.usda.gov/data-products/food-access-research-atlas.aspx#.UvjpDc62yRY), an online mapping tool based on this updated data, provides users with the ability to map various measures of food access by census tract across the U.S. Multiple briefings to senior policy officials were conducted for this report, and related mapping tool and multiple major media stories made this research one of the most widely cited findings from ERS in the past year. Over a million maps showing the locations of areas with low access measures were generated within a week of the Atlas' release on the ERS website.

- *Households including members with disabilities are at higher risk for food insecurity.* Recent ERS research analyzed the prevalence of food insecurity by a range of types of disabilities. The report focused on two groups of households that include adults with disabilities: 1) households with a working-age adult with a disability that prevented work (*not in labor force-disabled*); and 2) those with a working-age adult with a specified disability (hearing, vision, mental, physical, self-care, or going-outside-home disability) and no indication that their disability prevented them from working (*other reported disabilities*). Food insecurity was most prevalent among households with an adult who was *not in labor force-disabled* (33.5 percent), followed by those with a working-age adult with *other reported disabilities* (24.8 percent). Households with no working-age adult with a disability had a much lower prevalence of food insecurity (12.0 percent). Close to two in five households with very low food security included an adult with a disability. The study findings demonstrate the importance of disabilities as a determinant of food insecurity.

- *Americans increased their away-from-home share of caloric intake from 17.7 percent in 1977-1978 to 31.6 percent in 2005-2008, mainly from table-service and fast-food restaurants.* Food prepared away from home (FAFH)—whether from table-service restaurants, fast-food establishments and other locations, or from a take-out or delivery meal eaten at home—is now a routine part of the diets of most Americans. Previous ERS research found that FAFH tends to be lower in nutritional quality than food prepared at home (FAH), increases caloric intake, and reduces diet quality among adults and children. A recent study updated previous research by examining dietary guidance and the nutritional quality of FAH versus FAFH in 2005-2008, compared with 1977-1978. Data from 2005-2008 indicated that food consumed away from home was higher in saturated fat and sodium, and was more cholesterol dense than food consumed at home.

- *Analysis of milk consumption behavior provides insight into recent* trends. Decreases in the intake of fluid milk since the 1970s mainly reflect changes in how often U.S. consumers drink milk, not the portion sizes consumed when they drink milk. Generational differences in intake frequency have contributed to the per capita decline in intake. Related research focusing specifically on income and price changes found that small changes in prices and income modestly affect a household's choice among milk products. However, households mitigate the impact of more substantial price and income shocks by switching from more expensive to less expensive products.

- *New food labeling regulations and new diet and nutrition information can affect food companies' use of health- and nutrition-related claims.* An ERS report published in February, 2013 examined health and nutrition related claims on new U.S. food and beverage products from 1989 to 2010. The report also analyzed 2009-2010 sales and average nutrient content data for new food and beverage products carrying at least one of the ten most common health and nutrition related claims. The percentage of food products making health and nutrition related claims fell between 1989 and 2001, but then rose from 2001 to 2010. A proliferation of new products with claims appealing to weight-conscious consumers between 2001 and 2010 reflects growing awareness of obesity-related problems and educational campaigns targeting obesity. Claims related to gluten, antioxidants, and omega-3 ranked among the leading health and nutrition related claims by 2010. Growing consumer demand for food products that contribute to overall health beyond basic nutrition may have provided manufacturers with incentives to supply and promote these products. The largest increase in health and nutrition related claims over 2001 to 2010 were for "no gluten," followed by "no trans fats." Overall, voluntary health and nutrition related claims by food companies were present on 43.1 percent of new products introduced in 2010 and sales of those products carrying health and nutrition related claims exceeded that of all other new food products introduced during the year. Results of this research were presented in briefings to senior policy officials.

- *ERS food availability data updated.* The ERS food availability (per capita) data system includes three distinct, but related data series. The data serve as popular proxies for actual consumption. The food availability data are now available through 2011 at the national level and most commodities have annual data extending back to 1909. This data series provides estimates, for example, of the pounds of beef available for domestic consumption per capita per year. Also included in the data system are data on nutrient availability in the food supply and data on loss-adjusted food availability. This data series provides estimates, for example, of the calories of beef available for domestic consumption per capita per day. This system provides important statistical indicators that track food and nutrient availability, and the data system makes information available for policymaking and regulatory decisions such as for farm assistance programs, nutrition education, public health programs, and regulation of vitamin and mineral fortification and food labeling.

ERS research on USDA's food and nutrition assistance programs found the following:

- *Nutrition standards for competitive foods in schools may affect foodservice revenues*. USDA's National School Lunch Program (NSLP) and School Breakfast Program (SBP) supply most of the foods and beverages obtained by children in American schools. Many schools also sell other foods and beverages, often called "competitive foods," because they compete with USDA meals for children's food selections. In response to concern about the nutritional quality of these foods, the Healthy Hunger-Free Kids Act of 2010 required USDA to set nutritional requirements for competitive foods served by schools that also offer

USDA school meals. This report examines U.S. students' competitive food selections, their contribution to school foodservice revenues, and how that contribution might change under more strict nutrition standards. Using data from two national surveys of schools and School Food Authorities to examine competitive food selections and school foodservice revenues, findings indicate that most of the competitive foods selected by students in 2005 were of low nutritional value. The amount of revenue school foodservices obtained from competitive foods varied widely. The majority obtained less than 12 percent of revenues from competitive foods. Some school foodservices were more reliant on competitive foods, with 10 percent of foodservices obtaining 36 percent or more of their revenues from these foods. School foodservices with high competitive food revenues typically were located in more affluent districts and served fewer students receiving free and reduced-price lunches than did schools with low competitive food revenues. Secondary (middle and high) schools received much more revenue from competitive foods than did elementary schools. These results were used by USDA's Food and Nutrition Service to be better informed about potential impacts of competitive food rules.

- *Supplemental Nutrition Assistance Program (SNAP) participation leads to modest changes in diet quality.* Previous research has shown that SNAP effectively reduces food insecurity, but questions remain about the extent to which it affects the quality of adult participants' diets. This report compares the Healthy Eating Index (HEI) scores for adults in low-income households that do and do not participate in SNAP, and finds SNAP participation results in a large increase in the likelihood of consuming whole fruit, and a slightly lower consumption of dark green/orange vegetables. The report also finds that SNAP participants have slightly lower HEI scores (both total and components) than nonparticipants, meaning that they have slightly lower diet quality. They do, however, consume less saturated fat and sodium than low-income nonparticipants.

- *Participation in SNAP and Unemployment Insurance examined.* Recent ERS research estimates households' participation in the Supplemental Nutrition Assistance Program (SNAP) and Unemployment Insurance (UI) programs and provides nationally representative annual estimates for 2004-2009 of households' multi-program or "joint" participation patterns in both SNAP and UI, including breakouts of household types categorized by household income relative to poverty, race/ethnicity, and education level. SNAP and UI are two strands of the Nation's *recessionary safety net*—the subset of safety-net programs for which participation is responsive to the business cycle. The study found that an estimated 14.4 percent of SNAP households also received UI at some time in 2009 (a recessionary year), an increase of 6.6 percentage points from 2005 (a full-employment year). Conversely, an estimated 13.4 percent of UI households also received SNAP in 2009, an increase of 2.3 percentage points from 2005. SNAP households with lower annual income relative to the poverty line or with household heads who did not complete high school were relatively less likely to also receive UI, indicating that these populations were more likely to rely on SNAP benefits alone (without UI).

- *Detailed Supplemental Nutrition Assistance Program (SNAP) participation estimates at the county level in Texas provide estimation blueprint for other states*. ERS research linked SNAP administrative records from Texas to the American Community Survey (ACS). The large sample size of the ACS enables the estimation of SNAP participation rates for demographic subgroups and counties within the State and for demographic subgroups within the largest counties in Texas, helping SNAP administrators to better target outreach. The methods developed for the Texas estimates have begun to be adopted by other states and could lead to more accurate and detailed nationwide estimates of SNAP participation.

ERS research on the safety of the nation's food supply found the following:

- *Three recent studies examined by ERS provide cost-of-foodborne-illness estimates ranging from $14.1 billion to $152 billion.* An ERS report published in November, 2013 compared recent cost-of-foodborne-illness estimates and examined the reasons for differences in these estimates. The report showed that differences in these estimates were largely due to the number of diseases considered, the valuation methods used, and uncertainty about disease incidence estimates. ERS briefings to the Food Safety and Inspection Service on this research provided key guidance on food safety cost estimates.

Summary of Budget and Performance
Statement of Department Goals and Objectives

The Economic Research Service (ERS) was established in 1961 from components of the former Bureau of Agricultural Economics principally under the authority of the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627). The mission of ERS is to inform and enhance public and private decision making on economic and policy issues related to agriculture, food, the environment, and rural development.

ERS has four strategic goals that correspond to each of the four USDA strategic goals. To achieve these goals, ERS provides research, data, and analysis to enhance the understanding of policy makers, regulators, program managers, and those shaping debate on economic and policy issues.

Goals and Programs Crosswalk

USDA Strategic Goal	**Agency Strategic Goal**	**Agency Strategic Objectives**	**Programs that contribute**	**Key Outcome**
USDA Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.	**USDA Strategic Goal 1:** Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.	**Objective 1.1:** Enhance Rural Prosperity **Objective 1.2:** Create Thriving Communities **Objective 1.3**: Support a Sustainable and Competitive Agricultural System	Economic Research and Analysis	Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues affecting rural development, rural well-being, farm and household income, and rural communities.
USDA Strategic Goal 2: Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.	**USDA Strategic Goal 2:** Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.	**Objective 2.1:** Restore and Conserve the Nation's Forests, Farms, Ranches, and Grasslands **Objective 2.2:** Lead Efforts to Mitigate and Adapt to Climate Change **Objective 2.3** Protect and Enhance America's Water Resources	Economic Research and Analysis	Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues related to developing Federal farm, natural resource, and rural policies and programs that respond to the challenges of climate change and the need to protect and maintain the environment while improving agricultural competitiveness and economic growth.

USDA Strategic Goal	Agency Strategic Goal	Agency Strategic Objectives	Programs that contribute	Key Outcome
USDA Strategic Goal 3: Help America promote agricultural production and biotechnology exports, as America works to increase food security.	**USDA Strategic Goal 3:** Help America promote agricultural production and biotechnology exports, as America works to increase food security.	**Objective 3.2:** Ensure U.S. Agricultural Resources Contribute to Enhanced Global Food Security **Objective 3.2:** Enhance America's Ability to Develop and Trade Agricultural Products Derived from New Technologies **Objective 3.3**: Support Sustainable Agriculture Production in Food-Insecure Nations	Economic Research and Analysis	Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of economic issues related to adoption of economically and environmentally sustainable technologies to support enhanced food security, factors affecting trade of U.S. agricultural products (including products produced using biotechnology), strategies to reduce trade barriers and increase markets for U.S. products(including biotechnical exports)
USDA Strategic Goal 4: Ensure that all of America's children have access to safe, nutritious, and balanced meals.	**USDA Strategic Goal 4:** Ensure that all of America's children have access to safe, nutritious, and balanced meals.	**Objective 4.1:** Increase Access to Nutritious Food **Objective 4.2:** Promote Healthy Diet **Objective 4.3**: Protect Public Health by Ensuring Food is Safe	Economic Research and Analysis	Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues related to improving the efficiency, efficacy, and equity of public policies and programs relating to domestic and international food prices and availability at home and abroad, consumer food choices, nutrition and health outcomes, nutrition assistance programs, and protecting consumers from unsafe food.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

Key Outcome 1: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues affecting rural development, rural well-being, farm and household income, and rural communities.

ERS will identify key economic issues related to rural economic development, farm viability, rural household prosperity and well-being, and competitiveness. ERS will use sound analytical techniques to understand the immediate and broader economic and social consequences of how alternative policies and programs and changing market conditions affect rural and farm economies and households. ERS will effectively communicate research results to policy makers, program managers, and those shaping the public debate on rural economic conditions and performance of all sizes and types of farms. Examples of these activities include the following:

- Developing a comprehensive, integrated base of information on rural economic and social conditions that can be used by Federal policy makers for strategic planning, policy development, and program assessment.

- Analyzing how investment, technology, Federal policies, demographic trends, increased foreign competition in low-wage industries, and growing demand for highly skilled labor affect rural America's capacity to prosper in the global marketplace.
- Conducting research to better understand the role and effectiveness of investments in infrastructure, housing, and business assistance for sustaining rural communities, particularly in areas with rapid population growth or long-term population decline.
- Providing timely, accurate agricultural economic analysis and data on the impacts of decisions in risky situations to help farmers and ranchers make more informed production and marketing decisions.
- Researching and disseminating economic intelligence about the structure of, performance in, information systems of, new technology in, and foreign direct investment in the U.S. food manufacturing, processing, wholesale, retail, and food service industries.

Selected Past Accomplishments toward Achievement of the Key Outcome:

Future research and analysis will build on the successes of past performance to deepen understanding of issues explored, highlight new policy concerns revealed by prior analysis, and anticipate needs of policy makers and decision makers. Examples of recent progress are listed in the section on Status of Program. Past accomplishments toward achievement of the key outcome include: research on the links between regional assets and economic growth; analysis of the regional effect of a boom in energy production on employment and earnings; information on the well-being of rural veterans and their contributions to community prosperity; analysis of the business, technology, and government policy forces driving the long-term trend of increasing farm size; analysis of the lack of convergence of cash and futures market prices over the 2005-2010 period and implications for the traditional price discovery and risk management roles of futures markets; and new models to assess the impacts of extreme weather, new technologies, and new production practices on crop yields.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

ERS will conduct the following research on the farm and rural economy:

Innovation in Rural Businesses. Innovation is regarded as the key to economic prosperity. Conventional wisdom is highly skeptical of the innovative capacity of rural areas. Analysis of the Rural Establishment Innovation Survey data will provide the first robust estimates of substantive innovation in rural and urban tradable sectors. Analysis of establishment and community characteristics associated with substantive innovation such as human capital and the availability of broadband will inform programs and policies for creating jobs, developing new markets, and increasing competitiveness for rural businesses and communities. Survey data will also allow the first analysis of user entrepreneurship in rural areas—marketable products and services that grow out of personal need or needs of individual businesses—that has been identified as a source of highly innovative entrepreneurship in the US.

Rural Community Health and Economic Development. Access to primary health care is a critical need and health care services are among the largest and most rapidly growing employers in many rural areas; affecting not only the health of rural people, but also their economic opportunities. Although substantial research has investigated how various factors influence the decision of physicians to work in rural areas, little research has sought to understand what rural communities themselves can do to attract and retain primary health care providers, or how attracting health care providers affects the economic prospects of rural communities. ERS will address these issues based on a survey of health care providers and interviews with community leaders in 150 small rural towns in the southern and central regions of the U.S. The information will inform government efforts to improve access to primary health care and promote economic development in rural areas by identifying successful approaches that some rural communities are using to address these needs which could be adopted or adapted elsewhere.

Rural Child Poverty. This study will identify the sources of the increases in rural child poverty both among rural households and across rural counties. Of particular interest in the county analysis will be counties with high concentrations of people with low education and their propensity for high child poverty. Poverty among rural children has risen markedly since 2000. While the rise was sharpest during the Great Recession, child poverty was also rising in the early 2000s and has continued to rise since 2009. The rate is considerable higher in rural areas than urban areas, but it varies across rural areas. In general, child poverty is affected by family structure, parental labor force participation and wages, parental education, among other factors.

Forecast of Farm Income, Assets and Debt. Annually, estimates of farm income, assets and debt (balance sheet) are developed and published for public use through the ERS web site. In addition, three times each year, ERS provides updated income and balance sheet forecasts that reflect the most recent information available on production, prices and quantities of crops, livestock, products, and other outputs and services generated from farms. The Bureau of Economic Analysis' (BEA) National Income Staff use this information in developing their estimates of gross domestic product (GDP) and National Income Accounts and estimates of Personal Income and Outlays, and Corporate profits. Forecast data are also provided to the Council of Economic Advisors, and the estimates are also used by BEA's Regional Economic Measurement Division in developing a system of regional economic indicators that help form the basis for dissemination of Federal Revenue Sharing funds.

ERS will conduct the following research on U.S. agricultural markets:

Market Analysis and Outlook. ERS, working closely with the World Agricultural Outlook Board, the Foreign Agricultural Service, and other USDA agencies, conducts market analysis and provides short- and long-term projections of U.S. and world agricultural production, consumption, and trade. The market and outlook program enhances the quality, transparency, and accessibility of data and analytical information.

Price Discovery in Modern Agricultural Markets. It is increasingly common for agricultural commodity market transactions to occur outside of traditional spot or cash markets, relying instead on fixed contracts, price formulas, or a wide range of other coordinated arrangements that specify the terms of agreement under which products are delivered and prices are determined. ERS will examine the extent to which US markets for crops and livestock are becoming "thin" as spot market transactions decline, and will explore the implications for participants in the marketing chain, welfare effects, and the consequences of possible policy responses.

Real-time Price Discovery in Commodity Futures Markets. Futures markets are a primary mechanism for risk management and price discovery for many of the most widely-produced agricultural commodities in the United States. Futures prices are very sensitive to information shocks, and ERS research has demonstrated the informational value of important USDA reports by analyzing price changes in these contracts using end-of-day data. Today, most futures exchanges remain open while USDA reports are released, allowing traders to process and act on government information as it becomes available. Using *intraday* trading data, ERS will analyze the real-time effects of important USDA reports on price levels and volatility for selected US agricultural commodities.

Agricultural Productivity Growth in the United States and Abroad: Comparison of Metrics and Drivers. Given likely future increases in global demand for agricultural commodities, continued productivity growth is essential to avoid substantial price increases and environmental stresses. ERS produces annual estimates of agricultural productivity (indexes of inputs, outputs, and total factor productivity (TFP)) for the U.S. and for individual States, and works with allied groups to produce consistent international measures for a panel of countries. Following on past research that addressed domestic productivity measurement and trends, research during FY 2015 will generate estimates of TFP growth across countries; evaluate relative U.S. performance; and investigate the sources of cross country differences in agricultural productivity growth over time.

ERS will conduct the following research on farm and commodity policy:

Impacts of 'Shallow Loss' support payments on the demand for Federal Crop Insurance. ERS will examine how the availability of shallow loss supports in both Title I (Revenue Loss Coverage – RLC)) and Title XI (Supplemental Coverage Option - SCO) of the 2014 Farm Bill may affect producer demand for federal crop insurance (FCI). These programs may affect both the number of acres insured and insurance coverage rates. For example, there may be some overlap in coverage between RLC and crop insurance programs that could induce some farmers to change acres enrolled FCI as well as FCI coverage rates. In addition, SCO is formally linked to FCI via the coverage levels the producer selects for acres enrolled in FCI, and farmers must forgo RLC payments if enrolled in SCO. Hence, farmers may choose different FCI coverage levels when enrolled in SCO rather than when enrolled in RLC.

Farm Programs and Farm Household Income Volatility. Despite the increasing Federal emphasis on programs to reduce income risks to farmers, there is limited empirical information about farm household income volatility or the role Federal programs play in mitigating income fluctuations. ERS analysis will examine how income volatility has changed over time as Federal risk management programs have evolved and expanded, and will determine the extent

that Federal agricultural programs (direct payments, crop insurance, and disaster assistance) mitigate farm income volatility. This research will also examine the effect of crop insurance adoption on income volatility and on farm household behavior (crop mix, input use, off-farm labor supply).

Antibiotics Use in Livestock Agriculture. There is growing concern that widespread antibiotics use has led to the emergence of organisms that are resistant to most or all antibiotics, thus posing a significant human health risk. As a result, there are growing pressures to reduce the use of antibiotics in livestock agriculture for purposes of disease prevention and growth promotion. The Food and Drug Administration has announced a new guidance intended to phase out uses for growth promotion, and retailers are separately imposing their own limits. ERS will assess how restrictions on antibiotics use will affect markets for livestock, feed, and meat products.

ERS will conduct the following activities related to homeland security:

Analysis of Animal Disease Outbreaks. In FY 2015, ERS researchers will collaborate with Federal and academic researchers to examine how economic variables and factors affect animal and crop disease outbreak assessments. This work will examine how economic analysis can help to develop clearer views of actual and hypothetical outbreaks, and to more fully identify what factors are significant in measuring the success of a mitigation or prevention efforts. This research focuses on efforts to introduce economic components into epidemiological analysis that will allow analysts and decision makers to include social (e.g., impacts on rural communities) considerations and expand the number of criteria that may be used to determine effective outbreak responses. ERS, in 2015, will continue to invest in the data and analytical capacity needed to provide the current market context and data need to support USDA Homeland Security event assessments. In addition, ERS is contributing expertise as subject matter experts to the Department of Homeland Security, Science and Technology Directorate, for the Agro-terrorism Risk Assessment.

Key Outcome 2: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues related to developing Federal farm, natural resource, and rural policies and programs that respond to the challenges of climate change and the need to protect and maintain the environment while improving agricultural competitiveness and economic growth.

ERS will identify key economic issues related to interactions among natural resources, environmental quality, and the agriculture production system. ERS also will use sound analytical techniques to understand the immediate and broader economic and social consequences of alternative policies and programs to protect and enhance environmental quality associated with agriculture. ERS research analyzes the economic effects and cost effectiveness of resource, conservation, environmental, and commodity programs and their linkages. Topics include USDA's conservation programs and environmental policies addressing water and air quality and climate change associated with agricultural production. ERS will effectively communicate research results to policy makers, program managers, and those shaping public debate on agricultural resource use and environmental quality.

Examples of these activities include the following:

- Characterizing implications of conservation and environmental policy design. Conservation policy design is generally limited to defining the subset of producers eligible to participate in a program, constructing the incentive structure (how much will be paid for which activities), and selecting program participants from among willing bidders. ERS research examines options for using market forces to improve the economic, environmental and distributional performance of programs. Design features examined include the baseline level of performance necessary to receive payments or participate in markets, options for targeting specific producer types (e.g., socially disadvantaged farmers), regions, or environmental attributes, the use of auctions for soliciting high benefit or lower cost offers, and procedures for selecting participants from among all program applicants.
- Characterizing policy drivers for land management and land use change. Farm and environmental policies, including farm programs, biofuel policies, conservation programs and climate policies, may encourage farmers to modify cropping patterns, to change their crop management practices, to expand cropland and/or to retire cropland. ERS research examines whether and to what extent changes in land management and land use would occur under alternative policy specifications.

Selected Past Accomplishments toward Achievement of the Key Outcome:

Future research and analysis will build on the successes of past performance to deepen understanding of issues explored, highlight new policy concerns revealed by prior analysis, and anticipate upcoming needs of policy makers and decision makers. Examples of recent progress are listed in the section on Status of Program. Past accomplishments toward achievement of the key outcome include: showing the cost and efficacy of a regional manure transport model to reduce nutrient runoff in the Chesapeake Bay basin; information on the role of conservation programs on drought risk adaptations; the potential impacts of climate change on U.S. crop and livestock production; and an evaluation of the extent to which incentives for conservation programs encourage practices that would not have occurred otherwise.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

ERS will conduct the following research on climate change:

Mitigation of Global Greenhouse Gas: The Role of Agriculture, Forestry, and the Competition for Land. Allocation of land for agriculture and forestry plays a central role in societal challenges such as climate change and mitigation of greenhouse gas emissions. Economic analysis will focus on alternative greenhouse gas mitigation policies, including biofuel production and greenhouse gas offsets, with a focus on global agriculture, forestry, and the competition for land. This analysis will simultaneously model the dynamic response of energy and agricultural systems in terms of cost, scale, and timing, with a time horizon to the year 2100.

Agricultural Responses to Climate Change. Weather conditions that have shaped domestic and international agriculture are likely to be significantly affected by climate change. The extent to which such changes present a risk to food supplies, farmer livelihoods, and rural communities depends in part on the direction, magnitude, and rate of such changes, but equally importantly on the ability of the agricultural sector to adapt to changing patterns of yield and productivity, production costs, and resource availability. ERS research will explore potential impacts of climate change on U.S. agricultural production, markets and the environment, focusing on the constraints and opportunities arising from changing patterns of precipitation, projected shifts in regional water supply and demand, and the implications for irrigated and dryland agriculture, crop rotations and other farm management practices. The potential role of climate-resilient technological change, like drought-tolerant crop varieties, as an adaption strategy will also be investigated. ERS research will also examine climate change adaptation strategies in specific international contexts, such as implications for food security in Sub-Saharan Africa.

ERS will conduct the following research on conservation, water, and environmental issues:

Policy Options for Increasing the Provision of Ecosystem Services from Agriculture. ERS has a broad program of research on the design and implications of markets for ecosystem services, such as greenhouse gases and water quality. Research will examine the economic and environmental implications of alternative approaches to designing environmental markets. Specific projects will focus on the potential role of auctions, bidding, and other forms of economic and informational incentives in increasing environmental benefits obtain through conservation programs. A second set of projects will focus on behavioral interventions to increase farmer enrollment offers in conservation programs. ERS is currently collaborating with FSA on a pilot program that will augment the auction mechanism used to enroll participants in the CRP, harnessing lessons from market design and experimental economics to increase auction efficiency.

Economics of reducing nutrient losses from agriculture in the Mississippi Atchafalaya River Basin. This study will examine the economic consequences of reducing nutrient losses from agriculture to the Gulf of Mexico and its implications for improving environmental quality. Every summer, a large hypoxic zone forms in the Gulf of Mexico. Low dissolved oxygen in the Gulf is a serious environmental concern that can impact valuable fisheries and disrupt sensitive ecosystems. Agriculture is a major source of nutrients. Reducing nutrient losses has been a major conservation goal for USDA and many Mississippi Basin states. However, despite years of investment in conservation measures, most cropland does not meet NRCS criteria for good nutrient management.

Livestock Producer Responses to Environmental Regulations. ERS will study the efficacy of Concentrated Animal Feeding Operation (CAFO) environmental regulations mandated in 2003 by examining how livestock and crop

operations responded to the rules. Specifically, the study will investigate, according to the relative degree of regulation; changes in the land base for manure application; changes in manure nutrient application rates on regulated operations; and changes in manure application on nearby non-regulated operations. Since States also have specific environmental regulations, the research will also utilize a compendium of State-level CAFO regulations, previously developed at ERS, to separately identify the separate impacts of Federal and State regulations.

Key Outcome 3: Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of economic issues related to adoption of economically and environmentally sustainable technologies and factors affecting trade of U.S. agricultural products (including products produced using biotechnology).

ERS will identify key economic issues related to the competitiveness and sustainability of rural and farm economies, including economic factors guiding the development and adoption of new technologies and production systems to support food security and trade. These activities include the following:

- ERS supports the USDA Biotechnology Coordinating Council and interdepartmental efforts with the Food and Drug Administration and the Environmental Protection Agency through research that addresses impacts for farmer and industry behavior. Research and related data collection efforts are designed to capture the broad effects of this technology.
- ERS provides important information on changes in production technology of food production and adoption of new agricultural inputs and practices that have significant implications for the way in which the Nation's food supply is produced.
- ERS develops and disseminates research and analysis on the U.S. food and agriculture sector's performance in the context of increasingly globalized markets. Key emphasis areas include regional free trade agreements, domestic policy reforms, and the principal drivers of structural changes in global supply and demand.
- ERS produces an annual assessment of the prevalence and depth of food security in 76 developing and transition countries. ERS will expand public access to the data and model used to conduct this analysis by making the full database and several country models available on its website. In addition, ERS is developing new model capabilities, including the ability to assess the impact of changes in food prices, which will make the model capable of addressing all four dimensions of food security—availability, access, utilization and stability.

Selected Past Accomplishments toward Achievement of the Key Outcome:

Future research and analysis will build on the successes of past performance to deepen understanding of issues explored, highlight new policy concerns revealed by prior analysis, and anticipate needs of policy makers and decision makers. Examples of recent progress are listed in the section on Status of Program. Past accomplishments toward achievement of the key outcome include: analyses that indicate how regional trade agreements create trade in agricultural and food products; research showing that global food security remained virtually unchanged between 2012 and 2013; research on factors affecting exports of US broiler meat, Brazilian sugar, and Russian grain; and an analysis of trade and agricultural policy issues concerning China

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

ERS will conduct the following research on the organic sector and production technologies:

The U.S. Organic Sector: Emerging Issues and Policy Dimensions. The federal organic regulatory program includes a "USDA organic" label that has bolstered consumer assurance and helped drive a rapid expansion in sales. Domestic supply now trails demand for many products. Ongoing ERS research describes changes in the character of the U.S. organic sector in response to this growth, and highlights some emerging issues and concerns, including analysis of recent structural changes in the organic farm sector and examination of organic price premiums for top processed products and fresh foods. ERS expects to publish a report in FY 2015 that examines the costs, risks and other economic issues involved in maintaining coexistence between organic and genetically-engineered crops in the U.S.

Research on the economics of pollination: Pollinators are critical for a sustainable ecosystem and the pollination of crops across the country. USDA agencies have been working steadily to ensure a healthy, productive pollinator

system through research, pest management, and improved forage and habitat. During FY 2015, ERS will continue to participate in the Department's Pollinator Working group by informing Departmental decisions through research and analysis on the economics of pollination and alternative approaches to protect and improve pollinator health.

The Economics of Glyphosate Resistance Management. Glyphosate is an environmentally benign herbicide that controls an array of weeds. Glyphosate resistance is currently documented in 14 weed species in the U.S., and the potential exists for significant amounts of acreage to be affected. This study examines economic incentives that might contribute to the evolution of glyphosate resistance in weeds; the impacts of resistance on input use, yield, and profit; the impacts of the adoption of best management practices (BMPs); and the aggregate costs of resistance. This study also examines economically efficient decision rules for managing weeds under resistance evolution and the tradeoffs associated with alternative approaches for promoting adoption and coordinating resistance management efforts across farms.

Findings from USDA Economic Surveys of Certified Organic Field Crop Producers. ERS will examine the structure and profitability of organic grain production using national producer surveys, each including a targeted sample of organic growers. Interest in organic field crop production is evident by growth in U.S. crop acres under certified organic systems during the past decade. Despite numerous experimental field trials, little information is available about the relative costs and returns of organic grain (corn, wheat, soybeans) production. This research will identify similarities and differences in the characteristics and production costs of commercial organic and conventional field crop producers, and will shed light on whether certified organic production offers alternatives to generate higher returns for commodity producers with a limited resource base, who otherwise might exit.

ERS will conduct the following research on global agricultural markets and food security:

International Food Security Assessment. Ongoing ERS research analyzes a range of factors that determine the effect of changing production and prices on food security in 76 developing countries, and produces in-depth special articles on key food security issues. The food security situation in 76 developing countries is projected to deteriorate over the next decade. Estimates indicate that the number of food-insecure people in those countries has been increasing. Price hikes for food and fuel, coupled with a slowdown in global economic growth, hinder long-term food security progress.

The Trans Pacific Partnership (TPP) and U.S. Beef Exports to Japan. ERS research will examine how a Trans-Pacific Partnership (TPP) agreement will affect both U.S. and third country beef exports to Japan. Japan is one of the largest meat importing countries in the world, and a major market for U.S. exports. Japan currently imposes relatively high tariffs on beef to protect domestic producers and officials have identified this sector as one of the five most sensitive sectors in the ongoing TPP negotiations. While TPP could lead to greater access for U.S. beef in Japan, other TPP countries will be afforded the same access, including Australia which supplied 50 percent of Japan's $2 billion beef import market in 2012. Consequently, U.S. gains in Japan will depend on how Japanese importers view U.S. meat products vis-à-vis other major exporters within the TPP.

China Livestock Modernization and Trade Opportunities. ERS research will examine China's livestock modernization strategy which facilitated productivity growth and large increases in animal protein production in earlier decades with surprisingly little impact on agricultural trade. China's ability to expand domestic livestock output to meet growing demand is vitally important to US exporters. Many trade policy issues and market promotion activities are related to trade in feeds, meats and dairy. ERS will also review the evolution of China's livestock modernization strategy and explain why past productivity gains cannot be extrapolated into the future, and why China's imports of feed, meat, dairy, and inputs have risen in recent years.

Changing Market Dynamics in Asian Markets for Beef, Dairy, and Animal Feed. ERS research will focus on how evolving production and trade patterns in South and Southeast Asia will influence global and U.S. markets for beef, dairy, and feedgrains. Rising incomes in Southeast Asian countries has led to increasing meat consumption and feed demand and there is considerable uncertainty as to whether countries in this region will continue to be mostly self-sufficient in feed as livestock production expands or whether feed grain and oilseeds imports will increase. In South Asia, India currently has the world's largest dairy herd, is a leading consumer of dairy products, and has quickly become the world's leading exporter of beef (buffalo)

Transatlantic Trade and Investment Partnership (TTIP). The United States and the European Union (EU) have committed to negotiating the Transatlantic Trade and Investment Partnership (TTIP) with the goals of eliminating tariffs and tariff-rate quotas, increasing investment, and reducing barriers imposed by non-tariff measures. The US and EU are both large economies that together accounted for almost 47 percent of global GDP in 2012; hence, reducing market access barriers between the two economies will alter trade flows, commodity prices, and consumption and production patterns for both economies as well as for other trading partners. ERS will analyze and quantify the costs of current trade and domestic policy distortions, and the potential benefits of their elimination or reduction under different reform scenarios for the US and global agricultural markets.

Continuing and Emerging Issues in Measuring Domestic Agricultural Support. Attention to the quality and broader value of objective measures of policy effort that are comparable across countries has been growing as countries respond to economic stress with new domestic support policies and as governments seek policy innovations to spur agricultural development. Building on experience in both development and use of such measures, ERS will examine critical conceptual and technical weaknesses of current measurement systems and the potential effects of failing to correct them on their value for both monitoring and guiding policy choices.

Reliability and Cost Effectiveness of Index Insurance: Applications in the U.S. and the Developing World. Managing risk is an important policy tool for many developed countries, including the United States. Managing risk is also a key to improving the stability dimension of food security in developing countries. However countries often lack the disaggregated data necessary to develop and implement sound risk management programs. Weather based index insurance is being piloted in several developing countries, but it is hard to assess how effective it is in comparison to programs in developed countries. ERS will analyze the performance of index insurance in comparison to its established crop insurance programs. These results will be used to guide assessments of index insurance in selected developing countries.

Household-Level Coping Strategies in Response to the World Food Price Crisis. Poor, food insecure households often spend a high proportion of their income on food. Sudden price increases often force dramatic adjustments. Previous research documents the negative effect of price shocks on household food consumption and dietary diversity. ERS will analyze household coping strategies for India, a country with a large domestic food assistance program, to determine if similar adjustments to food consumption occur. It will also examine non-food related adjustment patterns and their impact for development.

ERS will conduct the following activities related to homeland security:

Analysis of Animal Disease and Risk Assessments. In FY 2015, ERS will be actively working through interagency activities with USDA APHIS and researchers associated with the DHS Science and Technology Directorate's Foreign Animal Disease Working Group. ERS analysts will continue to serve on the DHS Interagency Bioterrorism Risk Assessment Working Group for the National Biodefense Analysis Countermeasures and Biological Threat Characterization Centers, and will continue to serve on review committees for the Bioterrorism Risk Assessments (BTRA). The collaborative efforts of ERS researchers provide BTRA stakeholders with credible and impartial analytic support to inform biodefense investments. These efforts directly support the USDA goal to help America promote agricultural production and biotechnology exports, as America works to increase food security.

Key Outcome 4: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues related to improving the efficiency, efficacy, and equity of public policies and programs relating to domestic and global food prices and availability, consumer food choices, nutrition and health outcomes, nutrition assistance programs, and protecting consumers from unsafe food.

ERS will identify key economic issues affecting food prices, food access and availability, food consumption patterns, and food safety. ERS will use sound analytical techniques to understand the immediate and long-term efficiency, efficacy, and equity consequences of alternative policies and programs aimed at ensuring access by children and adults to safe, nutritious, affordable, and adequate meals. ERS ongoing research will also explore factors that can improve the effectiveness and efficiency of USDA and other Federal food aid programs at a time of resource scarcity. ERS will effectively communicate research results to policy makers, program managers, and those shaping efforts to promote abundant, safe, and healthful food at home and abroad. Examples of these activities include the following:

- Providing economic analysis of the food marketing system to understand factors affecting the availability and affordability of food for American consumers.
- Providing annual estimates of the quantity of food available for human consumption, and measures of disappearance and loss in the food system.
- Providing economic analysis of how people make food choices, including demands for more healthful, nutritious, and safer food, and of the determinants of those choices, including prices, income, education, and socio-economic characteristics.
- Conducting analyses of the benefits and costs of policies to change behavior to improve diet and health, including nutrition education, labeling, advertising, and regulation.
- Conducting economic analyses of the impacts of the Nation's domestic nutrition assistance programs, including the Supplemental Nutrition Assistance Program (SNAP); the Special Supplemental Nutrition Program for Women, Infants, and Children; and the Child Nutrition Programs.
- Evaluating the dietary and nutritional outcomes of USDA's food and nutrition assistance programs.
- Conducting research on food program targeting and delivery to gauge the success of programs aimed at needy and at-risk population groups, and to identify program gaps and overlaps.
- Conducting research on program dynamics and administration, focusing on how program needs change with local labor market conditions, economic growth and recession, and how changing State welfare programs interact with food and nutrition programs.
- Conducting food safety economics research, with the goal of providing a science-based approach to valuing food safety risk reduction, assessing industry costs of food safety practices, and understanding the interrelated roles of government policy and market incentives in enhancing food safety.
- Providing decision makers and the public with food safety information through publications, web materials, and briefings that address the economics of food safety, including consumer knowledge and behavior, industry practices, the relationship between international trade and food safety, and government policies and regulations.
- Working with Federal food safety agency partners to evaluate available food borne illness data related to meat, poultry and egg products, and to develop more accurate measures of the effectiveness of regulatory strategies in reducing preventable food borne illness.
- Building food-price and food-consumption databases to provide a basis for analyzing the impacts of food policy.

Selected Past Accomplishments toward Achievement of the Key Outcome:

Future research and analysis will build on the successes of past performance to deepen understanding of issues explored, highlight new policy concerns revealed by prior analysis, and anticipate upcoming needs of policy makers and decision makers. Examples of recent progress are listed in the section on Status of Program. Past accomplishments toward achievement of the key outcome include: research tracking trends in the Women, Infants, and Children (WIC) program infant formula rebate contracts; a comparison of recent food safety cost-of-illness estimates; an analysis of the effect of transportation costs on produce prices; and a study of the effect of the Supplemental Nutrition Assistance Program (SNAP) participation on diet quality.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

ERS will conduct the following research on food choices, food safety, and health outcomes:

The National Household Food Acquisition and Purchase Survey (FoodAPS). FoodAPS is a nationally representative survey of household food purchases and acquisitions. FoodAPS provides unique and detailed data about household food choices that are not available from any other current government survey. Detailed information was collected about foods purchased for consumption at home and away from home as well as foods acquired through food and nutrition assistance programs (both public and private). The detailed data will be made available for researchers beginning in the middle of 2014, and descriptive reports of key survey measures will be published by the end of 2014. An initial research results conference is planned for the spring of 2015 and analytical policy-relevant research reports will be developed in early FY15.

How Much Do Americans Pay for Fruits and Vegetables? ERS maintains the Fruit and Vegetable Prices database. Average prices per pound or pint for over 150 products as purchased at retail stores will be estimated using 2012 scanner data to update the previous 2008 estimates along with the costs for a cup-equivalent of each of these same fruits and vegetables as consumed. Costs to consume account for weight gained or lost through preparation, such as draining the liquid from a can of corn. These new estimates will inform the committee currently planning the update of the Dietary Guidelines for Americans for 2015.

Can consumers discriminate between high and low calorie menu items at restaurants using only their nutrition knowledge? In this study, ERS will evaluate a consumer's ability to discriminate between low-calorie and high-calorie menu items using only some basic knowledge of nutrition. Restaurant foods are typically higher in calories than meals consumed at home. A goal of the 2010 Patient Protection and Affordable Health Care Act is to encourage healthier food choices at restaurants by providing consumers with information about the calorie content of menu items. However, doesn't a well-informed consumer already know that pasta with alfredo sauce has more calories than the same type of pasta with a red sauce and vegetables? Or that fries are a higher calorie side dish than a salad with light dressing?

Examining the dietary quality of Americans from 1977 – 2010. Understanding secular trends in diet is important for assessing research needs and formulating dietary policy. ERS research on dietary quality over time has been widely cited in the *Dietary Guidelines for Americans* and by researchers. However, ERS researchers have encountered major data limitations – limited and dated nutrient and food servings data available in the 1977-78 Nationwide Food Consumption Survey (NFCS) and 1989-91 Continuing Survey of Food Intakes by Individuals (CSFII). These data shortcomings will be addressed by utilizing current state of food composition knowledge to conduct a comprehensive analysis of U.S. dietary trends.

Using behavioral economics to help consumers buy healthier foods in low-income area grocery stores. Using data from the Flexible Consumer Behavior Module from the National Health and Nutrition Examination Survey and ERS's Food Atlas, this study will provide descriptive statistics, such as average Healthy Eating Index (HEI) scores, the amount of time spent shopping, the amount of time spent traveling to grocery stores, general knowledge of MyPlate and label use among individuals living in food deserts. These statistics will illustrate some of the hurdles facing low-income consumers to show that, for many, nutrition may not be a top priority. Researchers will then apply key findings from behavioral economic studies to consumer food purchasing behavior to develop a set of possible strategies for increasing healthier food choices in grocery stores. The results will inform decisionmaking about ways to encourage healthier food choices;

Estimating food-attributable fractions of foodborne illness from time series data. This study will pioneer use of time series data on food consumption and foodborne illness to estimate the relative contributions of specific foods to illnesses caused by major foodborne pathogens. Reliable measures of the role of different foods in foodborne illness caused by specific pathogens are critical to government's and industry's ability to target food safety interventions effectively. USDA, FDA and CDC have all identified a need to develop more reliable methods to estimate this relationship.

The Food Safety Modernization Act (FSMA) and the Fresh Produce Industry. The Food Safety Modernization Act (FSMA) is the most extensive food safety legislation since the 1950s for Food and Drug Administration (FDA)-regulated food. It includes on-farm regulation of produce production, extends Hazard Analysis and Critical Control Points (HACCP)-like requirements to food and animal feed facilities, and addresses import safety through a combination of third-party certification and government audits. ERS will examine the effects of FSMA across the fresh produce supply chain, including the guidance issued by FDA as it relates to the development of a risk based food safety system.

Shifting Consumer Behavior and Impacts on Produce Markets. ERS research will examine how changing produce and legume consumption and trade patterns are likely to affect the quantity and mix of produce supplied in the United States and the implications for US agriculture if Americans fully adhere to Dietary Guideline Recommendations. The health benefits from increased consumption of produce and legumes are well known, and many consumers are shifting their food consumption patterns to reflect the latest dietary guidelines. Nevertheless, the average American diet still falls short of the daily recommendations for fruit and vegetables. At the same time, there have been noticeable shifts across different types of fruits and vegetables and between market segments (e.g.,

canned versus fresh or frozen) to reflect differences in perceived health benefits as well as greater availability of off-season supplies from international sources.

China Food Safety: Challenges, Conflicts, and Solutions. Food safety is emerging as one of the key issues influencing China's food and agricultural markets. Problems are deeply rooted and consumer confidence will not likely be restored simply by boosting regulatory oversight or requiring certifications. ERS research will explore the fundamental institutional and regulatory approaches that must be addressed in China to ensure a safe food supply. Effective food safety systems must align the interests of farmers, processors, regulators and consumers. The rising volume of trade between the U.S. and China elevates the importance of understanding China's food safety issues and the need for effective solutions.

ERS will conduct the following research on USDA's food and nutrition assistance programs:

Analyzing the link between Supplemental Nutrition Assistance Program (SNAP) participation and health. While much of the research about the effect of SNAP focuses on its effect on food security, diet, or diet-related health conditions, this research project will examine health directly. In particular, ERS will estimate the effect of SNAP on three key measures of underlying health: self-reported health, outpatient utilization, and office-based doctor visits. Preliminary results suggest that SNAP improves all of these outcomes.

Characteristics of school districts implementing farm-to-school programs. This project will identify school district characteristics associated with participation in farm to school activities during 2011-12. Farm to school activities include procurement of local food for school meal programs as well as educational activities such as field trips to farms and edible school gardens. Many school districts have started these activities both to support agricultural producers closer to home and to inspire students' enthusiasm for fresher, healthier foods. USDA supports these activities through grants and technical assistance. The study will provide insights into priorities for assistance, both in terms of geography and problems faced.

Sorting out the effects of expanded categorical eligibility, income volatility, and other policy changes on SNAP Access. In the 2000s, many States expanded the definition of eligibility for SNAP to include individuals who qualified for non-cash assistance from Temporary Assistance for Needy Families (TANF) or related programs. These policies raised the gross income limit and removed the asset limits in many states. Some analysts ascribe the large rise in SNAP caseloads since 2008 to these policies, while others find that changes in unemployment explain most of the increase. The issue is complicated by the use of household survey data to measure the poverty status of SNAP recipients. Measurement issues explored in previous research show that one should distinguish between monthly and annual measures of eligibility and participation in order to truly understand the poverty level of individuals who benefit from the program. This research will identify the sources of eligibility of SNAP participants using the Survey of Income and Program Participation (SIPP) 2008 panel linked to State level SNAP administrative data. SIPP includes a fuller set of variables that can be used to estimate eligibility than in other household surveys, such as assets and deductible expenses. SNAP administrative data from New York, Texas, and Georgia will be linked to the SIPP in order to show which individuals in the SIPP sample truly participated in SNAP, since under-reporting of SNAP participation is a key source of measurement error.

How state policies influence the antipoverty effect of SNAP benefits. ERS will construct a state-level panel of annual data from 1990 to 2010 to examine how state policies influence the extent to which SNAP benefits reduce the state-level rate and severity of poverty. SNAP is one of the largest means-tested transfer programs in the United States, providing benefits to almost 45 million Americans in an average month in 2011. Program expenditures have increased dramatically over the past decade, while the policy environment has shifted to greater emphasis on fiscal austerity. In an era of tightening budgets, it is essential to examine the program's effectiveness as part of the social safety net. An important indicator of SNAP's effectiveness is the extent to which it reduces poverty. ERS will estimate the effect of SNAP on poverty by including SNAP benefits in family income and calculating the percent reduction in state-level poverty measures that portray the rate and severity of poverty. The reduction in state-level measures of poverty due to SNAP will depend on a number of factors, including program structure and macroeconomic conditions.

ECONOMIC RESEARCH SERVICE

Strategic Goal Funding Matrix
(Dollars in thousands)

Program/Program Items	2012 Actual	2013 Actual	2014 Estimate	Increase or Decrease	2015 Estimate
Department Strategic Goal: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.					
Economic Analysis and Research	$28,127	$26,067	$28,571	+$2,126	$30,697
Staff Years	*144*	*133*	*141*	*-2*	*139*
Homeland Security	234	207	234	-	234
Staff Years	*2*	*2*	*2*	-	*2*
Total Costs, Strategic Goal……	28,361	26,274	28,805	+2,126	30,931
Total Staff Years, Strategic Goal……	*146*	*135*	*143*	*-2*	*141*
Department Strategic Goal: Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.					
Economic Analysis and Research	11,180	10,138	11,150	+538	11,688
Staff Years	*47*	*46*	*49*	*-1*	*48*
Homeland Security	-	-	-	-	-
Staff Years	-	-	-	-	-
Total Costs, Strategic Goal……	11,180	10,138	11,150	+538	11,688
Total Staff Years, Strategic Goal……	*47*	*46*	*49*	*-1*	*48*
Department Strategic Goal: Help America promote agricultural production and biotechnology exports as America works to increase food security.					
Economic Analysis and Research	18,511	17,094	18,779	+1,339	20,118
Staff Years	*92*	*84*	*89*	*-2*	*87*
Homeland Security	700	650	700	-	700
Staff Years	*4*	*4*	*4*	-	*4*
Total Costs, Strategic Goal……	19,211	17,744	19,479	+1,339	20,818
Total Staff Years, Strategic Goal……	*96*	*88*	*93*	*-2*	*91*
Department Strategic Goal: Ensure that all of America's children have access to safe, nutritious, and balanced meals.					
Economic Analysis and Research	18,423	16,857	18,624	+1,385	20,009
Staff Years	*85*	*79*	*84*	-	*84*
Homeland Security	-	-	-	-	-
Staff Years	-	-	-	-	-
Total Costs, Strategic Goal……	18,423	16,857	18,624	+1,385	20,009
Total Staff Years, Strategic Goal……	*85*	*79*	*84*	-	*84*
Lapsing Balances…..…….	547	378	-	-	-
Total Costs, All Strategic Goals…..……	77,723	71,391	78,058	+5,388	83,446
Total Staff Years, All Strategic Goals..	*374*	*348*	*369*	*-5*	*364*

Summary of Budget and Performance
Key Performance Outcomes and Measures

Agency Goal: The long-term performance goal across USDA and agency goal areas is the successful execution of the ERS program of economic research and analysis to provide policy makers, regulators, program managers, and those shaping the public debate on agricultural economic issues with timely, relevant, and high quality economic research, analysis, and data to enhance their understanding of economic issues affecting food and agriculture. A more detailed description of each of our performance measures is presented below.

Key Outcome: The key outcome of the ERS program is improved decision making by policy makers, regulators, program managers, and those shaping the public debate on socioeconomic issues affecting agriculture, food, the environment, and rural development.

Since ERS's research spans across a number of USDA mission areas and provides the information for improved decision making across USDA, its program supports all of the USDA Strategic Goals: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving; Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources; Help America promote agricultural production and biotechnology exports as America works to increase food security; and Ensure that all of America's children have access to safe, nutritious, and balanced meals. Our program is also aligned with the strategic vision put forth by the Research, Education, and Economics Mission Area Action Plan for USDA science.

The following performance measures allow ERS to estimate the impact of its broad research program efforts by tracking uses and users of our research and data products both within government as well as by industry and the general public. The first three items provide impact measures within government, while the last two provide a wider measure of users of our work.

Performance Measure	FY 2012 Actual	FY 2013 Actual	FY 2014 Target	FY 2015 Target
Inform policy officials and stakeholders on policy issues through briefings on research findings (number of briefings)	45	39	45	45
Provide research, data, and analysis on policy relevant issues at the request of key decision makers and policy officials (number of staff analyses produced)	487	518	500	500
Federal Register Notice and other Government use (number of notices citing ERS research and/or data)	44	34	40	40
Visits to ERS Web site (FY 2012); Number of page views (FYs 2013-2015) using Adobe Cloud software	4,600,000*	8,000,000*	8,000,000*	8,000,000*
Customer satisfaction with the ERS Website (score on a 0-100 scale from Foresee website satisfaction survey)	72	73	75	75

*****In FY 2012 and prior years, ERS tracked the number of unique visits to the ERS web site using SiteCatalyst software. Beginning in FY 2013 and forward, ERS began tracking the number of page views using Adobe Cloud software.

Inform policy officials and stakeholders on policy issues through briefings on research findings
Central to the mission of the ERS is the delivery of research findings, data, and analysis to key public and private decision makers. Briefings for senior policymakers ensure that the results of the Agency's research program are made available to, and used by, those who make decisions and implement public policy decisions related to

agriculture, food, the environment, and rural development. This measure tracks briefings for such officials as the Secretary of Agriculture and senior advisors, USDA Under Secretaries, USDA and other Federal program agency heads, and White House and Congressional staff.

Provide research, data, and analysis on policy relevant issues at the request of key decision makers and policy officials

This measure demonstrates that ERS research, market analysis, and data are used by decision makers. Requests from decision makers for rapid-response answers to key policy issues provided by ERS ("staff analysis") provide evidence that the Agency's research program helps support informed decision making by policy officials, including the Secretary of Agriculture and senior advisors, USDA Under Secretaries, USDA and other Federal program agencies, and White House and Congressional staff.

Federal Register Notice and other Government use

This measure tracks the number of rules published in the Federal Register that cite ERS research findings, data or analysis, plus instances where ERS research is cited in publications by the Government Accountability Office, the Congressional Research Service, the Congressional Budget office, and the Congressional Record. This measure demonstrates that ERS research findings, data, and analysis are used to support decision making and implementation of policies and programs.

Visits to the ERS website

This measure tracks the number of times information on the ERS website is accessed (FY 2012). In FY 2013-2015, the criteria for this measure changed to reflect the number of page views on the website. This measure demonstrates that the outputs from the ERS research, market analysis and data program are sought and used to support both public and private decision making on issues related to agriculture, food, the environment, and rural development.

Customer satisfaction with the ERS Web site

ERS uses a Web-centric approach to communicating with customers -- all ERS research, data, and other information disseminated by the agency are available through the ERS Web site. This measure is an indicator of customer satisfaction with the ERS Web site using a survey based on the American Customer Satisfaction Index (ACSI). The measure tracks satisfaction of Web site users and provides a basis for comparison with similar government and private sector Web sites. The target for this measure is at or above the average rating for government Web sites in the Information/News category.

Economic Research Service
Full Cost By Department Strategic Goal

Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating and economically thriving.

Dollars in thousands

PROGRAM	PROGRAM ITEMS	FY 2012 Actual	FY 2013 Actual	FY 2014 Estimate	FY 2015 Estimate
Economic Research and Analysis					
	Salaries and Benefits	18,993	17,909	18,885	18,770
	Pay Costs	0	0	171	193
	Data Acquisition	3,861	3,010	3,595	2,929
	Extramural Program	1,836	1,072	1,769	1,695
	Contracts	556	874	763	709
	Interagency Agreements	1,264	1,739	2,053	1,933
	Direct Costs	561	576	572	572
	Indirect Costs	1,290	1,094	998	4,130
	Total Costs	28,361	26,274	28,805	30,931
	FTEs	*146*	*135*	*143*	*141*
Performance Measure: Portfolio Review Score	Qualitative assessment by external experts of the relevance, quality, and performance of ERS research portfolios to enable better informed decisions on food and agricultural policy issues	Excellent	Excellent	Excellent	Excellent
	Total for Strategic Goal				
	Total Costs (program, direct, indirect)	28,361	26,274	28,805	30,931
	FTEs	*146*	*135*	*143*	*141*

Strategic Goal 2: Ensure our national forests and private working lands are conserved, restored and made more resilient to climate change, while enhancing our water resources.

Dollars in thousands

PROGRAM	PROGRAM ITEMS	FY 2012 Actual	FY 2013 Actual	FY 2014 Estimate	FY 2015 Estimate
Economic Research and Analysis					
	Salaries and Benefits	6,550	6,170	6,486	6,402
	Pay Costs	0	0	59	66
	Data Acquisition	3,280	2,339	2,477	2,276
	Extramural Program	555	307	613	528
	Contracts	6	154	134	139
	Interagency Agreements	128	594	702	661
	Direct Costs	197	193	191	191
	Indirect Costs	463	381	488	1,424
	Total Costs	11,180	10,138	11,150	11,688
	FTEs	*47*	*46*	*49*	*48*
Performance Measure: Portfolio Review Score	Qualitative assessment by external experts of the relevance, quality, and performance of ERS research portfolios to enable better informed decisions on food and agricultural policy issues	Excellent	Excellent	Excellent	Excellent
	Total for Strategic Goal				
	Total Costs (program, direct, indirect)	11,180	10,138	11,150	11,688
	FTEs	*47*	*46*	*49*	*48*

Strategic Goal 3: Help America promote agricultural production and biotechnology exports as America works to increase food security.

Dollars in thousands

PROGRAM	PROGRAM ITEMS	FY 2012 Actual	FY 2013 Actual	FY 2014 Estimate	FY 2015 Estimate
	Salaries and Benefits	12,619	11,884	12,566	12,394
	Pay Costs	0	0	114	128
	Data Acquisition	2,436	2,001	2,319	1,947
	Extramural Program	1,219	778	1,266	1,223
	Contracts	550	742	648	632
	Interagency Agreements	1,152	1,230	1,452	1,368
	Direct Costs	376	384	382	382
	Indirect Costs	860	724	732	2,745
	Total Costs	19,211	17,744	19,479	20,818
	FTEs	*96*	*88*	*93*	*91*
Performance Measure: Portfolio Review Score	Qualitative assessment by external experts of the relevance, quality, and performance of ERS research portfolios to enable better informed decisions on food and agricultural policy issues	Excellent	Excellent	Excellent	Excellent
	Total for Strategic Goal				
	Total Costs (program, direct, indirect)	19,211	17,744	19,479	20,818
	FTEs	*96*	*88*	*93*	*91*

Strategic Goal 4: Ensure that all of America's children have access to safe, nutritious and balanced meals.

Dollars in thousands

PROGRAM	PROGRAM ITEMS	FY 2012 Actual	FY 2013 Actual	FY 2014 Estimate	FY 2015 Estimate
Economic Research and Analysis					
	Salaries and Benefits	11,334	10,598	11,414	11,517
	Pay Costs	0	0	104	117
	Data Acquisition	214	969	1,026	957
	Extramural Program	1,141	1,104	1,646	1,676
	Contracts	1,624	1,666	1,455	1,220
	Interagency Agreements	2,985	1,527	1,802	1,697
	Direct Costs	353	357	355	355
	Indirect Costs	773	636	823	2,469
	Total Costs	18,423	16,857	18,624	20,009
	FTEs	*85*	*79*	*84*	*84*
Performance Measure: Improve Low Income Household Access to Fresh, Local, Healthy Food	USDA policy makers implement new local foods initiatives as a result of new data and information on community, local food market, and food assistance program characteristics, and analysis of effective alternatives for improving access to fresh, local foods	No	No	No	Yes
Performance Measure: Portfolio Review Score	Qualitative assessment by external experts of the relevance, quality, and performance of ERS research portfolios to enable better informed decisions on food and agricultural policy issues	Excellent	Excellent	Excellent	Excellent
	Total for Strategic Goal				
	Total Costs (program, direct, indirect)	18,423	16,857	18,624	20,009
	FTEs	*85*	*79*	*84*	*84*
	Total for Economic Research and Analysis				
	Total Costs, All Strategic Goals	77,176	71,013	78,058	83,446
	Total FTEs, All Strategic Goals	*374*	*348*	*369*	*364*