2010 Explanatory Notes Economic Research Service

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ECONOMIC RESEARCH SERVICE

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 and retail food prices, foodborne 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 published and electronic reports and articles; special staff analyses, briefings, presentations, and papers; databases; and individual contacts. More information on ERS's program is contained on the ERS Web site (www.ers.usda.gov).

The ERS headquarters is in Washington, D.C. ERS does not have any field offices. As of September 30, 2008 there were 364 permanent full-time employees.

ERS did not have any Office of Inspector General or Government Accountability Office evaluation reports during the past year.

ECONOMIC RESEARCH SERVICE

Available Funds and Staff Years 2008 Actual and Estimated 2009 and 2010

	Actual 2008		Estimated 2	2009	Estimated 2010	
		Staff	Staff			Staff
Item	Amount	Years	Amount	Years	Amount	Years
Economic Research Service	\$77,943,000 545,601	386	\$79,500,000	396	\$82,478,000	398
Total, Salaries and Expenses	\$77,397,399	386	\$79,500,000	396	\$82,478,000	398
Obligations under other USDA appropriations:						
Agricultural Marketing Service	15,000	-	20,000	-	20,000	-
Foreign Agricultural Service	810,242	1	600,000	1	400,000	1
National Agricultural Statistics Service	37,432	-	40,000	-	40,000	-
Risk Management Agency	20,000	-	20,000	-	20,000	-
World Agricultural Outlook Board	7,920	-	8,000	-	8,000	-
Animal and Plant Health Inspection Service	20,000	-	20,000	-	20,000	-
_						
Total, Other USDA Appropriation	910,594	1	708,000	1	508,000	1
Total, Agriculture Appropriations	78,307,993	387	80,208,000	397	82,986,000	399
Total, Economic Research Service	78,307,993	387	80,208,000	397	82,986,000	399

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Permanent Positions by Grade and Staff Year Summary

2008 Actual and Estimated 2009 and 2010

	2008 Actual		2010 Estimated
Grade	Washington	Washington	Washington
	DC	DC	DC
Senior Executive Service	7	7	7
GS-15	73	76	76
GS-14	86	87	87
GS-13	99	99	99
GS-12	52	56	58
GS-11	23	23	23
GS-10	1	1	1
GS-9	24	26	26
GS-8	10	10	10
GS-7	2	2	2
GS-6	3	3	3
GS-5	1	1	1
GS-4	2	2	2
GS-3	2	2	2
GS-2	1	1	1
Total Permanent Positions	386	396	398
Unfilled Positions, end-of-year	-22		
Total Permanent, Full-Time Employment, end-of-year	364	396	398
Staff-Year Estimate	386		398

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ECONOMIC RESEARCH SERVICE

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

Salaries and Expenses:

For necessary expenses of the Economic Research Service, [79,500,000] <u>82,478,000</u>. (7 U.S.C. 292, 411, 427. 1441a. 1704, 1761-68, 2201, 2202, 2225, 3103, 3291, 3311, 3504; 22 U.S.C. 3101; 42 U.S.C. 1891-93; 44 U.S.C. 3501-11; 50 U.S.C. 2061 et seq., 2251 et seq Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2009).

ECONOMIC RESEARCH SERVICE

SALARIES AND EXPENSES

Appropriations Act, 2009.	\$79,500,000
Budget Estimate, 2010.	82,478,000
Increase in Appropriation	<u>+2,978,000</u>

SUMMARY OF INCREASES AND DECREASES (On basis of appropriation)

	2009		Program	2010
Item of Change	Estimated	Pay Costs	Changes	Estimated
Environmental Services Markets	-	-	\$1,800,000	\$1,800,000
All Other	\$79,500,000	\$1,178,000	-	\$80,678,000
Total Available	\$79,500,000	\$1,178,000	\$1,800,000	\$82,478,000

\$10-5\$ ECONOMIC RESEARCH SERVICE

PROJECT STATEMENT (On basis of appropriation)

Economic Analysis and Research Homeland Security Unobligated Balance

Total, Available or Estimate

Rescission

Total, Appropriation

2008 Actual		2009 Estimated			2010 Estim	ated
Amount	Staff Years	Amount	Staff- Years	Increase or Decrease	Amount	Staff- Years
\$76,047,799	386	\$78,517,000	396	\$2,978,000	\$81,495,000	398
983,000		983,000		-	983,000	
366,600		-		-	-	
77,397,399	386	79,500,000	396	2,978,000	82,478,000	398
545,601						
77,943,000	386	79,500,000	1			

Economic Research Service (ERS)

Justification of Increases and Decreases

- (1) An increase of \$2,978,000 for economic analysis and research, consisting of:
 - (a) An increase of \$1,800,000 and two staff years to support research on the economics of Environmental Service Markets and Policies for reducing greenhouse gas emissions.

Overview: ERS proposes an increase of \$1,800,000 to develop analytical tools and assessments of the economic implications of environmental service market design, with an emphasis on markets for carbon offsets. Agriculture plays a major role in domestic cap-and-trade proposals for addressing climate change. Domestic offsets from agricultural carbon sequestration or changes in livestock or soil management can significantly reduce the nation's costs of greenhouse gas (GHG) reductions. More generally, markets for all types of environmental services could increase farmer investments in environmental stewardship, thereby expanding the supply of such environmental services as carbon sequestration, other greenhouse gas reductions, clean air and water, and wildlife habitat.

Benefits for all Americans: Both farmers and the public could benefit from markets for environmental services. If farmers could sell environmental services like other commodities, they would benefit from an increased, more diversified stream of income. Farmers would also likely invest more in conservation on their farms, thus increasing the level of environmental services valued by the public, including wildlife habitat, wetlands, climate, air quality, and water quality. In addition, increased private investment in conservation on farms would enable public funds disbursed through USDA Conservation Programs to focus on those environmental concerns markets cannot address. Moreover, many of the sectors likely to be regulated under such markets, including energy-intensive industries and public utilities, affect all Americans, and reducing their costs of meeting regulatory obligations through agricultural offsets will benefit the public broadly. However, those benefits will only be realized if policy makers have sufficient information to design efficient and effective markets. The ERS research initiative will provide that information.

ERS will conduct research to help make these markets work efficiently and smoothly. This research will (1) use state of the art economic techniques to analyze economic and environmental consequences of alternative approaches to involve agriculture in the implementation of GHG mitigation policies and ecosystem service markets; (2) incorporate into the analysis the consequences of inherent uncertainties associated with agricultural participation in environmental markets; and (3) investigate potential tradeoffs among competing conservation goals and climate policies.

Background: U.S. farmers and ranchers control significant amounts of the U.S. land base that can provide a host of environmental services, including carbon sequestration, other greenhouse gas reductions, cleaner air and water, flood control, and wildlife habitat. Creating markets for environmental services could increase private investment in environmental stewardship and increase the flow of environmental services.

Concerns over climate change have led to a number of policy proposals to reduce greenhouse gas (GHG) emissions, including proposals for a mandatory cap on large emitters, with an accompanying cap and trade program to reduce compliance costs. Agriculture's relatively small contribution to total national GHG emissions, and difficulty in monitoring agricultural emissions have so far exempted agriculture from any actual or proposed emissions cap. Agriculture is generally seen as a possible source of carbon offsets--created through changes in agricultural land use and land management to

sequester carbon, improved nitrogen management and methane destruction--in cap and trade proposals. Including provisions for agricultural offsets in a GHG policy could significantly reduce

the costs of national greenhouse gas control. Those cost savings are particularly important given ambitious climate goals in an era of tight global economic conditions. It would also provide a multibillion dollar market opportunity for farmers, ranchers, and other rural landowners.

While studies indicate that agricultural mitigation measures are cost effective relative to greenhouse gas emission mitigation options in other sectors, significant gaps in our knowledge must be addressed to realize the full mitigation potential of these measures. For example, the cost and effectiveness of many agricultural practices for sequestering carbon or reducing emissions is not well known, making both the long-term performance of carbon offsets and the economic consequences for producers uncertain. In a broader context, greenhouse gas mitigation is only one of a number of conservation issues facing land management, including soil and water quality, wildlife resilience and sustainability, air quality, and various other environmental concerns.

Carbon offsets may motivate changes in land use and land management on all farms, not just those participating in the offset market. These changes in turn may affect the costs of energy, food, and fiber. Carbon offset markets will have complicated interactions with conservation programs. Improved models of market responses are necessary to understand these complicated interaction effects and will be key to predicting unintended consequences and designing effective markets.

Research Activities and Specific Issues: Cap-and-trade systems involving agriculture can help reduce the costs of meeting environmental goals, but creating markets for environmental services is no easy task. Designing new markets involves a myriad of decisions with implications for economic efficiency and environmental effectiveness. Further, a number of impediments must be overcome for markets to form and to function efficiently, including uncertainty over the performance of conservation practices, lack of standards, high transactions costs, and potential conflicts with other policies and programs. Improved understanding of agriculture's multi-faceted role in markets for environmental services generally, and in global climate policy in particular, is critical for making informed decisions about policy design and program management.

Because these markets would likely be voluntary for farmers, specific design details may influence farmers' participation decisions, the practices and land use options they would be willing to enroll, and the economic efficiency and environmental performance of the market

An increase of \$1,500,000 will support the development of analytic models for evaluating agriculture's role in environmental markets. Model results depend upon the assumptions, definitions, and structure of the model, as well as the data that are used for input. A model that captures the key policy elements is critical for providing appropriate guidance to policy makers. ERS's current models lack some of the critical elements necessary for properly evaluating greenhouse gas mitigation policies, such as greenhouse gas emission coefficients and energy use for different farming activities. Cutting edge economic tools, including experimental economics and analytical approaches for evaluating risky investments, will be particularly useful for considering implications of inherent uncertainties. The initiative would support model upgrades, consultation, and the development of new data sources necessary to evaluate the important issues related to agriculture's participation in environmental markets. Comprehensive model development will be completed within two years of receipt of funding. Intermediate products –including improved baseline data resources–will be developed and model capacity enhanced incrementally, so as to provide input to policy discussions within one year's time and to maximize the public benefit of this initiative.

An increase of \$300,000 will support the hiring and training of two staff to extend ERS capabilities in addressing the impacts of ecosystem markets, including climate change policies.

Relationship to REE Goals and Objectives: The initiative contributes to REE Strategic Goal 6 to protect and enhance the Nation's natural resource base and environment, Strategic Goal 2 to enhance the competitiveness and sustainability of rural and farm economies, and

Strategic Goal 3 to support increased economic opportunities and improved quality of life in rural America. The desired outcome is informed decision-making based on the data, research, and analyses that comprise the research program's outputs. ERS stakeholders who would benefit from this research program include Congress, senior executive branch officials, the research community, USDA agencies (such as Natural Resources Conservation Service, Farm Services Agency, Agricultural Research Service, and National Institute of Food and Agriculture), and the Environmental Protection Agency.

Relationship to ERS's Current Program: The budget request is fully consistent with the ERS mission to inform and enhance public and private decision-making on economic and policy issues related to agriculture and natural resources. The investment in data and research is necessary to accelerate the transfer of benefits from empirical research to policy makers and program managers to ensure that increasing knowledge of opportunities and challenges is translated into strategies for enhancing environmental quality, providing opportunities for agricultural producers and rural residents, and supplying information critical to addressing emerging policy issues in a timely fashion.

(b) An increase of \$1,178,000 to fund pay costs.

This increase is necessary to maintain the current ERS program and to avoid a reduction in the university cooperative agreements programs. Without funding for pay costs, ERS would be unable to fill critical vacancies, which would cause gaps in the core research program. These gaps would become even more significant if funding for cooperative agreements is reduced or no longer available. Cooperative agreements are critical for building links between university and ERS research, and for strengthening USDA-land grant partnerships.

10-9 ECONOMIC RESEARCH SERVICE

Geographic Breakdown of Obligations and Staff Years 2008 Actual and Estimated 2009 and 2010

	2008 Actual		2009 Estimated		2010 Estimated	
_		Staff		Staff		Staff
	Amount	Years	Amount	Years	Amount	Years
Arizona	\$353,480	-	-	-	-	-
Arkansas	18,500	-	-	-	-	-
California	354,691	-	-	-	-	-
Colorado	208,034	-	-	-	-	-
Connecticut	319,611	-	-	-	-	-
District of Columbia	68,514,437	386	\$79,500,000	396	\$82,478,000	398
Georgia	244,337					
Illinois	935,977	-	-	-	-	-
Indiana	200,000	-	-	-	-	-
Iowa	125,050	-	-	-	-	-
Maryland	1,485,972	-	-	-	-	-
Massachusetts	236,984	-	-	-	-	-
Michigan	374,602	-	-	-	-	-
Minnesota	25,000	-	-	-	-	-
Mississippi	180,000	-	-	-	-	-
Missouri	49,037	-	-	-	-	-
Nevada	195,184	-	-	-	-	-
New Jersey	429,107	-	-	-	-	-
New York	221,505	-	-	-	-	-
North Carolina	327,764	-	-	-	-	-
Ohio	310,502	-	-	-	-	-
Oklahoma	283,531	-	-	-	-	-
Oregon	60,000	-	-	-	-	-
Pennsylvania	257,586	-	-	-	-	-
South Dakota	30,000	-	-	-	-	-
Tennessee	19,908	-	-	-	-	-
Texas	50,000	-	-	-	-	-
Virginia	1,000,000	-	-	-	-	-
Wisconsin	210,000	-	-	-	-	-
Australia	10,000	-	-	-	-	-
		-	-	-	-	-
Subtotal, Available or						
Estimate	77,030,799	386	79,500,000	396	82,478,000	398
Unobligated balance	366,600	-	-	-	-	
Total, Available or						
Estimate	77,397,399	386	79,500,000	396	82,478,000	398

Note: The distribution of 2009 and 2010 funds by State has not been determined at this time.

ECONOMIC RESEARCH SERVICE

Classification by Objects 2008 Actual and Estimated 2009 and 2010

Personne	el Compensation:	2008 Actual	2009 Estimated	2010 Estimated
Wasl	nington, D.C.			
11	Total personnel compensation	\$36,610,735	\$39,329,850	\$40,530,130
12	Civilian personnel benefits	8,470,958	9,110,150	9,387,870
13	Benefits for former personnel	0	0	0
	Total pers. comp. & benefits	45,081,693	48,440,000	49,918,000
Other Ob	jects:			
21	Travel and transportation of persons	861,356	750,000	750,000
22	Transportation of things	6,745	10,000	10,000
23.3	Communications, utilities, and			
	miscellaneous charges	631,864	600,000	600,000
24	Printing and reproduction	179,827	180,000	180,000
25	Other services	11,547,921	11,000,000	11,000,000
25.1	Interagency Agreements	1,439,085	1,500,000	1,500,000
25.5	Research and development contracts	6,731,526	7,300,000	8,800,000
25.6	ADP services and supplies	17,700	20,000	20,000
25.7	Miscellaneous Services, Data Acquisition	6,916,831	6,500,000	6,500,000
26	Supplies and materials	940,002	1,000,000	1,000,000
31	Equipment	1,056,333	1,000,000	1,000,000
41	Grants	1,619,778	1,200,000	1,200,000
43	Interest	138	0	0
	Total other objects	31,949,106	31,060,000	32,560,000
Total dire	ect obligations	77,030,799	79,500,000	82,478,000
Position	Data:			
	age Salary, ES positions	\$164,417	\$198,306	\$220,119
	age Salary, GS positions	\$98,298	\$111,234	\$123,469
	rage Grade, GS positions	13.0	13.0	13.0

ECONOMIC RESEARCH SERVICE

STATUS OF PROGRAM

Economic Research and Analysis Program

Enhance International Competitiveness of American Agriculture

Current Activities:

Competitiveness in the global economy means being able to create and sustain comparative advantages consistent with resource endowments and technical capabilities. The Economic Research Service (ERS) assesses policies and programs intended to understand barriers to trade in order to capitalize on comparative advantage. Regular market analysis and outlook provides insight into the global conditions of competition facing U.S. agriculture.

ERS continually develops and disseminates research and analysis on the U.S. food and agriculture sector's competitiveness. Key emphasis areas include global and regional trade policy issues, domestic and foreign agricultural policy reforms and their implications for international competitiveness, the structure and performance of agricultural commodity markets in a global context, and changes in economic conditions of major trading partners and competitors. ERS activities provide a foundation of research, analysis, and data to support USDA goals. In-depth analysis of agricultural market conditions, and research and analysis aimed at fostering economic growth and understanding foreign market structures round out the range of emphasis areas that enhance international competitiveness of American agriculture.

Selected Examples of Recent Progress:

2008 – 2009 World Economic Crises. The world economic crisis that began in 2008 has major consequences for U.S. agriculture. In a new ERS analysis, *The 2008/2009 World Economic Crisis: What It Means for U.S. Agriculture*, ERS discusses the effect of the U.S. and global economic downturn on the U.S. agricultural sector. The weakening of global demand because of emerging recessions and declining economic growth result in reduced export demand and lower agricultural commodity prices, compared with those in 2008. These, in turn, reduce U.S. farm income and place downward pressures on farm real estate values. So far the overall impact on U.S. agriculture is not as severe as on the broader U.S. economy because the record-high agricultural exports, prices, and farm income in 2007 and 2008 put U.S. farmers on solid financial ground.

<u>U.S.</u>, <u>Canada</u>, and <u>Mexico Economic Integration</u>. Implementation of the agricultural provisions of the North American Free Trade Agreement (NAFTA) has drawn to a close. In 2008, the last of NAFTA's transitional restrictions governing U.S.-Mexico and Canada-Mexico agricultural trade were removed, concluding a 14-year project in which the member countries systematically dismantled numerous barriers to regional agricultural trade. ERS has released a new publication, *NAFTA at 15: Building on Free Trade*, as a sequel to our continuing analysis of the changes and implications of NAFTA on U.S. agriculture. Agricultural trade within the free-trade area has grown dramatically, and Canadian and Mexican industries that rely on U.S. agricultural inputs have expanded. U.S. feedstuffs have facilitated a marked increase in Mexican meat production and consumption, and the importance of Canadian and Mexican produce to U.S. fruit and vegetable consumption continues to grow.

<u>Trade Negotiations and Policy Analysis</u>. ERS research on trade policy is focused on providing analysis that evaluates the impacts of changes in U.S. and other countries' agricultural trade policies. ERS research in support of the World Trade Organization (WTO) and bilateral negotiations has helped to inform and strengthen U.S. negotiating positions on agriculture. ERS has developed quantitative estimates of the impacts of market access and export subsidy liberalization proposals. Research on the impacts of the U.S-

Korea Free Trade Agreement provided insights into the expected changes in trade resulting from freer trade between the two countries. In a recent article, *World Trade Organization and Globalization Help Facilitate Growth in Agricultural Trade*, ERS examined the benefits and obligations of WTO membership. Despite strong critics of WTO, membership continues to grow as countries seek the benefits of expanding trade. In the WTO, member countries trade concessions to gain access to foreign markets, benefiting foreign producers and consumers in the aggregate.

China in 21st Century Agricultural Markets. ERS continues to maintain an active research program that investigates how policy and economic developments in China affect global agricultural markets. Recent research, China's Ongoing Agricultural Modernization: Challenges Remain After 30 Years of Reform, points to the fact that while the establishment of competitive markets for agricultural inputs and outputs has helped China raise agricultural production over the last 30 years, it faces several issues that will be more difficult to resolve. China's ability to meet its food and agricultural needs has exceeded the expectations of most observers. However, agricultural productivity growth in China has slowed in recent years, suggesting that China's potential for achieving efficiency gains from market-based reforms is diminishing. Chinese agriculture also faces stiff challenges in allocating scarce natural resources and integrating small farms, which still largely use hand-held tools, into modern, global agricultural markets.

<u>Developing Country Consumer Patterns</u>. Long-run consumer patterns are changing in middle-income developing countries. Globalization and income growth are resulting in increasing similarities worldwide in diets and food delivery mechanisms. ERS research, *Convergence in Global Food Demand and Delivery*, demonstrates that food-purchasing patterns and food delivery mechanisms of high-income countries are being increasingly copied by both upper middle-income countries (Mexico and Poland, for example) and lower middle-income countries (Brazil and China, for example). Middle-income countries are beginning to resemble high-income countries in their food purchasing patterns at both retail and food service outlets. Analyses of food expenditures across 47 countries indicate significant convergence in consumption patterns for total food, cereals, meats, seafood, dairy, sugar and confectionery, caffeinated beverages, and soft drinks.

Enhance the Competitiveness and Sustainability of Rural and Farm Economies

Current Activities:

ERS research and analysis provides insight into market conditions facing U.S. agriculture, avenues for innovation, and market expansion. In addition, ERS identifies and analyzes market structure and technological developments that affect efficiency and profitability. This includes research and analysis to help farmers and ranchers manage risk. ERS monitors the structure and performance of the food marketing system (food manufacturing, wholesaling, retailing, and service), both as to how efficiently the system performs its role and, in the consumer-driven agricultural economy, how effectively it conveys market signals from consumers.

The research conducted emphasizes the economic and financial structure, performance, and viability of the farm sector and of different types of farms, the state of food security, technological innovation, and productivity advance. ERS is researching the structure of agriculture by examining several elements, including the distribution of farm sizes, the diversification of farm operations, linkages between resource ownership and farm organizations, and business relationships among farms and with agribusinesses.

ERS also examines agricultural research and development (R&D) and its implications for agricultural production. The impressive productivity gains of the agricultural sector rest on years of R&D efforts. Public sector research is a powerful tool to promote various missions of USDA, hence ERS examines the level and direction of public R&D and its implications for agriculture. Research identifies and measures the importance of factors promoting private sector contributions to agricultural R&D, including expanded

technological opportunities, strengthened intellectual property, collaboration with the public sector, and globalization of markets.

Selected Examples of Recent Progress:

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 has enhanced the quality, transparency, and accessibility of data and analytical information. ERS continues to release regularly scheduled outlook and special focused market reports on grain, oilseed, livestock, dairy, poultry, aquaculture, sugar, rice, cotton, and fruit and vegetables.

Assessment of the Food, Conservation, and Energy Act of 2008 (2008 Farm Bill). ERS has a key role in assessing the economic impacts of the 2008 Farm Bill. Following the 2002 Farm Bill, ERS posted a "side-by-side" comparing the 1996 and 2002 Farm Bills, which has been the most used Web product ever produced by ERS. For the 2008 Farm Bill, ERS produced a Web-based side-by-side feature with improved functionality and more in-depth and descriptive content. The side-by-side provides the basis for updating content on the ERS Website to reflect new provisions. It provides the basis for comprehensive analysis of the economic impacts of the commodity, conservation and trade provisions.

Assessing Price and Revenue Based Commodity Support. The Food, Conservation, and Energy Act of 2008 (Farm Bill) gave eligible producers the option of participating in the Average Crop Revenue Election (ACRE) program in return for reductions and eliminations of payments under more traditional programs. In the *Economic Aspects of Revenue-Based Commodity Support*, ERS economists examine how the uncertainty in U.S. domestic commodity support payments may differ between price and revenue-based support. A theoretical revenue-based program based on recent market prices offers the potential for less variable payment outlays from year to year (benefiting the government) and less variability in farm revenue (benefiting the producer) than current approaches. Whether farmers prefer one type of support program over another depends on its impact on mean revenue and the variability of revenue. Revenue-based support scenarios generally reduced the downside risk of farming more than did current-style support, but farmer preferences for type of support would depend on their preferences for increasing mean returns versus decreasing the variability of returns.

Structural Change in Livestock Industries. U.S. livestock production has been shifting to larger operations that are more tightly coordinated through contracts with suppliers and buyers. Four ERS reports describe and analyze these developments: Characteristics and Production Costs of U.S. Hog Farms, 2004; The Changing Economics of U.S. Hog Production, Profits, Costs, the Changing Structure of Dairy Farming; and The Economic Organization of U.S. Broiler Production. The reports are part of a project that relies on farm-level surveys and that describes how production is organized, how that organization is changing, the driving forces behind change, and the impacts of change on productivity, prices, farm finances, and environmental performance. The 2009 report, The Transformation of U.S. Livestock Agriculture: Scale, Efficiency, and Risks, shows how U.S. livestock production has shifted to much larger and more specialized farms, and the various stages of input provision, farm production, and processing are now much more tightly coordinated through formal contracts and shared ownership of assets. In addition, large livestock operations also consolidate large quantities of manure in small geographic areas. The report, Changes in Manure Management in the Hog Sector, describes how hog manure management practices vary with the scale of production and how larger hog operations are altering their manure management decisions in response to environmental policies.

<u>Food Marketing Systems</u>. The U.S. Food Marketing System: Recent Developments, 1997-2006 speaks to the significant changes that are underway in the structure and performance of the U.S. food marketing system. This report discusses recent fundamental developments in types of food distribution channels, consolidation in food processing and distribution, and strategies used by food companies to move ahead of the competition.

Farm Definitions Affect Program Eligibility. Although individuals may have a mental picture of a "farm", the definition that is used for statistical purposes or for program implementation may be very different. The 2009 report, *Exploring Alternative Farm Definitions*, shows how broad definitions can encompass many units that produce very little, while most of the production occurs on a small number of much larger operations. Too broad a definition can provide misleading characterization of farms and farm structure in the United States. More stringent requirements have been proposed for farms to qualify for Federal agricultural program benefits, and this analysis evaluates several potential criteria to define target farms more precisely.

Agricultural Research Funding Sources. The public agricultural research system in the United States is a Federal-State partnership, with most research conducted at State institutions. A recent report, *U.S. Public Agricultural Research: Changes in Funding Sources and Shifts in Emphasis, 1980-2005*, focuses on the way public agricultural research is funded in the U.S., and how changes in funding sources over the last 25 years reflect changes in the type of research pursued. In recent years, State funds have declined, USDA funds have remained fairly steady, but funding from other Federal agencies and the private sector has increased. Along with shifts in funding sources, the proportion of basic research being undertaken within the public agricultural research system has declined.

Productivity Growth Drives U.S. Agriculture. This data set provides estimates of output, input, and productivity growth for the U.S. farm sector over the period 1948-2006, and for individual States for the 1960-2004 period. Enhancements to the database now provide more input detail, with separate series for pesticide and fertilizer inputs, and for hired and self-employed labor. The data show the importance of productivity advances to agricultural output growth and provide a source for analyzing the determinants of productivity growth.

Forecast of Farm Income, Assets and Debt. Estimates of farm income, assets and debt were developed and presented at the Agricultural Outlook Forum. An estimate of value added to the U.S. economy by the production of farm goods and services was also estimated. Updated income and balance sheet forecasts were developed, and reflect the most recent information available on production, prices and quantities of crops, livestock, and products and other outputs and services generated from farms. The updates also reflect inputs consumed in production. Updates include disaggregated value-added/farm income account information to the Bureau of Economic Analysis' (BEA) National Income Staff for their use in developing their estimates of Gross Domestic Product and National Income Accounts, and their estimates of Personal Income and Outlays, and Corporate profits.

Support Increased Economic Opportunities and Improved Quality of Life in Rural America

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, migration and immigration, job training and employment opportunities enhance rural economic welfare. Also examined are how Federal policies, public investment in infrastructure and technology enhance economic opportunity and the quality of life for rural Americans. ERS is studying the economic issues surrounding broadband Internet access and use in rural America, and a report will be completed in 2009. Equally important are our efforts to research and understand economic activity of 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. ERS uses the most up-to-date information on conditions and trends affecting rural areas,

provides the factual base for rural development program initiatives, and seeks ways to enhance our ability to monitor important rural trends. 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.

Selected Examples of Recent Progress:

Indicators of Rural Economic Performance. The current brochure, Rural America at a Glance, highlights the indicators of social and economic conditions in rural areas. The focus of the recent work is employment, poverty, population change, and demographic characteristics of non-metro areas. Employment growth slowed and unemployment rates rose in non-metro areas in 2008, reflecting the effects of higher energy prices and tighter credit. While the overall number of rural Americans has increased since 2000, the majority of non-metro counties lost population. Non-metro areas have grown at less than half the rate of metro areas during this period. The brochure reflects enhancement in our measures of rural economic well-being.

Rural Broadband Access in Rural Areas. Broadband Internet access is becoming essential for both businesses and households. Although rural residents enjoy widespread access to the Internet, they are less likely to have high-speed, or broadband, Internet access than their urban counterparts. The recent report, *Rural Broadband at a Glance, 2009 Edition*, shows that rural residents depend more on Internet use outside of the home, in places like the library, school, and work, where broadband Internet access is available.

<u>Hired Farmworkers as Part of Agricultural Labor Force</u>. ERS completed a profile of hired farmworkers that showed the unique characteristics of the hired farmworker labor market. Hired farmworkers make up a third of the total agricultural labor force and are critical to U.S. agricultural production, particularly in labor-intensive sectors such as fruits and vegetables. The hired farmworker labor market includes a large population of relatively disadvantaged and often unauthorized workers. The 2008 profile is an update to the 2000 ERS analysis of the Current Population Survey with expanded sections on legal status, poverty, housing, and use of social services.

Expanding Farm Income Opportunities. The statistical profile of farm-based recreation showed that this activity could provide an important niche market for farmers. The study used data from the Agricultural Resource Management Survey (ARMS) and the National Survey on Recreation and the Environment to analyze who operates farm-based recreation enterprises, such as hunting and fishing operations, horseback riding businesses, on-farm rodeos, and petting zoos. Farm-based recreation or agritourism provided income to about 52,000 U.S. farms in 2004. A follow-up study is planned using data from the 2007 ARMS and the Census of Agriculture that were administered in 2008.

Enhance Protection and Safety of the Nation's Agriculture and Food Supply

Current Activities:

ERS research is designed to support food safety decision-making in the public sector and to enhance the efficiency and effectiveness of public food safety policies and programs. The program focuses on valuing societal benefits of reducing and preventing illnesses caused by microbial pathogens; assessing the costs of alternative food safety policies; studying industry's incentives, through private market forces and government regulation, to adopt food safety innovations; assessing the value of private and public food safety actions by examining health outcomes; and analyzing consumer demand for food safety.

The Geo-Spatial Economic Analysis (GSEA) team builds on earlier ERS homeland security programs and ERS's economic, data, and geographic information systems (GIS) capabilities to analyze the economic effects of enhanced security and the potential impacts of accidental or intentional problems in the Nation's

agricultural and food sectors. GSEA uses current data and information about the U.S. agricultural and food systems, including resource use, production, processing, distribution, and consumption enhanced by GIS.

ERS is continuing its research on invasive species that affect livestock and crop production and the programs that control them. This activity contributes to USDA's efforts to prevent or control invasive species. An important concern is reducing the economic risks of invasive species to U.S. agriculture while preserving economic gains from trade and travel. ERS and the Animal and Plant Health Inspection Service (APHIS) created an Invasive Species Working Group to offer suggestions on how economic analyses can better contribute to pest risk assessments and control decisions by the public and private sectors. ERS is engaged in on-going evaluation of the research being produced through its external grants program. ERS supports the Invasive Non-Native Species crosscut by improving economic estimates of the risks posed by non-native weeds.

Selected Examples of Recent Progress:

Program of Research on the Economics of Invasive Species Management (PREISM). ERS analysis through PREISM develops research to improve the economic basis for invasive species management decisions in cooperation with APHIS and other USDA Agencies. PREISM distributes funds through two mechanisms: (1) peer-reviewed, competitive extramural research, which distributed \$6.7 million over the last six years (2003-2008); and (2) intramural research aimed at strengthening internal analytical capabilities to support USDA Invasive Species Program needs. PREISM research has funded 39 cooperative research or cooperative assistance agreements, and additional inter-agency agreements and competitive grants. Research with application to animal disease issues includes: Value of Animal Traceability Systems in Managing Contagious Animal Diseases, Economic Impacts of Foreign Animal Disease, Robust Inspection for Invasive Species with a Limited Budget, and Economics of Managing Infectious Wildlife Disease When Livestock are at Risk.

Economic Impacts of Foreign Animal Disease. As more is learned about the impacts of foreign animal-disease outbreaks, questions arise regarding the efficacy of existing animal disease-impact models for capturing the array of effects across many economic sectors and time. The Economic Impacts of Foreign Animal Disease presents a quarterly livestock and crop modeling framework in which epidemiological model results are integrated with an economic model of the U.S. agricultural sector to estimate the economic impacts of outbreaks of foreign-source livestock diseases. The framework can be applied to many livestock diseases, and this study uses the model to assess the results of a hypothetical outbreak of foot-and-mouth disease. Model results show large trade-related losses for beef, beef cattle, hogs, and pork, even though relatively few animals are destroyed.

Development of a Global Sanitary and Phytosanitary Regulation Database. ERS published a database, Phytosanitary Regulation of Fresh Fruits and Vegetables into the United States. This data product identifies which countries, under USDA phytosanitary rules, are eligible to export to the United States the fresh fruits and vegetables that are most important in the American diet, using data and information from APHIS, the United Nations Food and Agriculture Organization (FAO), and the World Bank. Data on the absolute and relative importance of eligible countries in international fruit and vegetable production and trade, individually and in aggregate, are also included. Having access to information on countries that are currently eligible to export these products to the United States lays the foundation for better understanding trade patterns, and can underpin analyses of the market effects of changes in phytosanitary rules, such as the decision to allow imports of Mexican avocados into the United States. ERS is currently working with a consortium of multilateral agencies, including the United Nations Conference on Trade and Development, the Organization for Economic Cooperation and Development, the WTO, the World Bank, and FAO, to expand the country and commodity coverage of the database.

<u>Food Safety and Imports: An Analysis of FDA Import Refusal Reports.</u> This report examines U.S. Food and Drug Administration data on refusals of food offered for importation into the United States from 1998

to 2004. Although the data do not necessarily reflect the distribution of risk in foods, the study found that import refusals highlight food safety problems that appear to recur in trade and where the FDA has focused its import alerts, examinations (e.g., sampling), and other monitoring efforts. The data show some food industries and types of violations may be consistent sources of problems both over time and in comparison with previous studies of more limited data. The three food industry groups with the most violations were vegetables (20.6 percent of total violations), fishery and seafood (20.1 percent), and fruits (11.7 percent). Violations observed over the entire time period include sanitary issues in seafood and fruit products, pesticides in vegetables, and unregistered processes for canned food products in all three industries.

The Effects of Avian Influenza News on Consumer Purchasing Behavior: A Case Study of Italian Consumers' Retail Purchases. To better understand how information about potential health hazards influences food demand, this case study examines consumers' responses to newspaper articles on Avian Influenza, informally referred to as bird flu. The focus here is on the response to bird flu information in Italy as news about Highly Pathogenic H5N1 Avian Influenza (HPAI H5N1) unfolded during the period of October 2004 through October 2006, beginning after reports of the first outbreaks in Southeast Asia, and extending beyond the point at which outbreaks were reported in Western Europe. Estimated poultry demand, as influenced by the volume of newspaper reports on bird flu, reveals the magnitude and duration of newspaper articles' impacts on consumers' food choices. Larger numbers of bird flu news reports led to larger reductions in poultry purchases. Most impacts were of limited duration, and all began to diminish within five weeks.

<u>Do Food Labels Make a Difference?</u> Consumers, food companies, third-party entities, and governments play a role in determining which attributes are described on the label. The interaction of these groups influences which information is labeled voluntarily, which is mandated, and which is not labeled at all. It shapes the way information is presented, and the accuracy and credibility of that information. The economics behind food labeling provide insight into the dynamics of voluntary food labeling and the types of market failures best addressed through mandatory labeling requirements. Data suggests that competition drives food manufacturers to voluntarily label their products' desirable attributes and to use third-party certifiers to bolster credibility.

Foodborne Illness Cost Calculator. ERS's estimates of the costs of illness and premature death for a number of foodborne illnesses have been used in regulatory cost-benefit and impact analyses. Like all cost estimates, the ERS estimates include assumptions about disease incidence, outcome severity, and the level of medical, productivity, and disutility costs. Changes to any of these assumptions could change the cost estimates and, as a result, change the way policymakers rank risks, prioritize spending, and formulate food safety policies. The Foodborne Illness Cost Calculator provides information on the assumptions behind foodborne illness cost estimates—and gives one the opportunity to make his own assumptions and to calculate his own cost estimates.

Economic Cost of Guillain-Barré Syndrome in the United States. This study estimated the annual economic cost of Guillain-Barré syndrome (GBS) in the United States in 2004, including the direct costs of medical care and the indirect costs due to lost productivity and premature death. The cost-of-illness method was used to determine the costs of medical care and lost productivity, and a modified value of a statistical life approach was used to determine the cost of premature deaths. Data were obtained from the Nationwide Inpatient Sample, the Medical Expenditure Panel Survey, the Compressed Mortality File, a telephone survey of 180 adult patients with GBS, and other sources. The estimated annual cost of GBS was \$1.7 billion including \$0.2 billion (14 percent) in direct medical costs and \$1.5 billion (86 percent) in indirect costs. Most of the medical costs were for community hospital admissions. Most of the indirect costs were due to premature deaths.

Economic Cost of Illness Due to Escherichia coli O157 Infections in the United States. The Centers for Disease Control and Prevention (CDC) has estimated that Shiga toxin–producing Escherichia coli O157 (O157 STEC) infections cause 73,000 illnesses annually in the United States, resulting in more than 2,000 hospitalizations and 60 deaths. In this study, the economic cost of illness due to O157 STEC infections

transmitted by food or other means was estimated based on the CDC estimate of annual cases and newly available data from the Foodborne Diseases Active Surveillance Network (FoodNet) of the CDC Emerging Infections Program. The annual cost of illness due to O157 STEC was \$405 million (in 2003 dollars), including \$370 million for premature deaths, \$30 million for medical care, and \$5 million in lost productivity. The average cost per case varied greatly by severity of illness, ranging from \$26 for an individual who did not obtain medical care to \$6.2 million for a patient who died from hemolytic uremic syndrome. The high cost of illness due to O157 STEC infections suggests that additional efforts to control this pathogen might be warranted.

Improve the Nation's Nutrition and Health

Current Activities:

ERS provides timely and in-depth analysis of the Nation's food consumption trends, dietary patterns, and the resulting nutritional and health outcomes. ERS's analysis and reporting are based on applied research that seeks to understand the linkages among preferences, economic incentives, and food choices. Food and dietary choices are influenced not only by prices, income, and Federal nutrition assistance programs such as the Supplemental Nutrition Assistance Program, but also from preferences shaped by family structure, time constraints, psychological factors, and nutrition information. To inform policymakers and the public about such determinants and drivers of consumption trends, ERS maintains and analyzes data sets that provide different "views" of the food consumption picture: food availability, household food spending, and which foods are eaten by whom, where, and how much. Obesity—including understanding its costs to individuals and society, how income and knowledge affect obesity status, and considering private versus public roles in reducing obesity—is an important focus of ERS. Much of the debate over the reasons for the rise in overweight and obesity in the United States has focused on the cost of healthful food—with some arguing that low-income households cannot afford healthful food, and others insisting that even for low-income households cost is not a barrier to a healthful diet. A current focus of ERS research is to investigate the role of food prices on healthful food choices.

USDA administers 15 domestic nutrition assistance programs that collectively form a nutritional safety net, providing children and low-income adults with either food, the means to purchase food, and/or nutrition education. These programs affect the lives of millions of people and receive substantial Federal funding. At some point during the year, about one in five Americans participates in at least one nutrition assistance program, and Federal outlays for these programs account for over half of USDA's total budget. Through its Food Assistance and Nutrition Research Program (FANRP), ERS conducts studies and evaluations of the Nation's nutrition assistance programs. FANRP's mission is "economic research for a healthy, well-nourished America." FANRP research is designed to meet the critical information needs of USDA, Congress, program managers, policy officials, the research community, and the public at large.

FANRP integrates both intramural and extramural research. The intramural research, conducted internally by ERS staff research, uses the agency's large research capacity, taking advantage of the agency's internal research capital and specialized knowledge base. At the same time, FANRP funds extramural research, often conducted jointly with ERS staff, that draws on the multidisciplinary expertise of nationally recognized social and nutrition science researchers and the resources of such noted institutions as the National Academy of Sciences, National Science Foundation, National Bureau of Economic Research, Urban Institute, the Brookings Institute, and numerous universities across the country. The three perennial research themes of FANRP are: 1) program outcomes and economic well-being of participants; 2) program access and economic determinants of participation; and 3) program dynamics and efficiency. Within these general themes, priority areas of research are selected annually. In developing the research priorities, FANRP works closely with USDA's Food and Nutrition Service.

The ERS program provides policymakers, regulators, program managers, and those shaping public debate with timely, high-quality analyses and data to enhance understanding of economic issues affecting the

nutrition and health of the U.S. population. These issues include factors related to food choices, consumption patterns, food prices, food security, nutrition assistance programs, nutrition education, and food industry structure. Such understanding underpins the capacity to understand and react to issues surrounding obesity, homeland security, and the responsiveness of the food system to consumer demands in a timely, effective manner. ERS enhances data on food markets, prices, consumption, and nutrition assistance by adding modules to national surveys, procurement of proprietary data, and linkages between survey and extent data.

Selected Examples of Recent Progress:

Can Low-Income Americans Afford a Healthy Diet? Low-income households tend to eat less nutritious diets than other households. On average they do not meet Federal recommendations for consumption of fruit, vegetables, whole grains, and low-fat dairy products, and they consume fewer servings of these nutritious foods than other households. The difference between low-income households' food choices and those of other households raises concerns about the affordability of healthy foods. Do low-income households have unhealthy diets because they cannot afford more healthy ones? This report finds low-income households that receive maximum benefits from the Supplemental Nutrition Assistance Program usually have the purchasing power necessary to afford healthy diets; others may not. Relative to other households, low-income households must allocate a higher share of both their income and time budgets to food if they wish to consume palatable, nutritious meals. For many American households, achieving an affordable healthy diet will require reducing their expenditures on less nutritious foods and moving nutrient-dense foods, such as fruit and vegetables, to the center of their plates and budgets.

Behavioral Economic Concepts to Encourage Healthy Eating in School Cafeterias: Experiments and Lessons from College Students. Changing small factors that influence consumer choice may lead to healthier eating within controlled settings, such as school cafeterias. This report describes a behavioral experiment in a college cafeteria to assess the effects of various payment options and menu selection methods on food choices. The results indicate that payment options, such as cash or debit cards, can significantly affect food choices. College students using a card that prepaid only for healthful foods made more nutritious choices than students using either cash or general debit cards. How and when individuals select their food can also influence food choices. College students who pre-selected their meals from a menu board made significantly different food choices than students who ordered their meals while viewing the foods in line.

The National School Lunch Program Background, Trends, and Issues. The National School Lunch Program is the Nation's second largest nutrition assistance program. In 2006, it operated in over 101,000 public and nonprofit private schools and provided over 28 million low-cost or free lunches to children on a typical school day at a Federal cost of \$8 billion for the year. The ERS report, *The National School Lunch Program Background, Trends, and Issues*, is intended as a briefing for policymakers and other stakeholders on the history and basic features of the program. It also addresses steps being taken to meet challenges facing administrators of the program, including tradeoffs between nutritional quality of foods served, costs, and participation, as well as between program access and program integrity.

Supplemental Nutrition Assistance Program (SNAP) and Obesity: What Do We Know? Results from reviewed studies indicate that for most participants in SNAP—children, non-elderly men, and the elderly—use of SNAP benefits does not result in an increase in either Body Mass Index (BMI) or the likelihood of being overweight or obese. However, for non-elderly women, who account for 28 percent of the SNAP caseload, some evidence suggests that participation in the SNAP may increase BMI and the probability of obesity. Different results for age and sex subgroups remain unexplained. Further, because SNAP benefits are issued to households, not individuals, mixed results across age and sex subgroups make it difficult to target policy alternatives to address potential weight gain among some participants while not affecting others in the household.

Balancing Nutrition, Participation, and Cost in the National School Lunch Program. The National School Lunch Program provides Federally subsidized meals to more than 30 million children each school day. Recently, reported high rates of obesity and overweight among children have focused attention on the nutritional quality of school lunches. However, this attention has raised another fundamental question: Can schools meet the program's nutrition goals while covering costs, especially in times of rising food prices? Schools face the dual constraints of meeting nutrition requirements and covering costs. The free-meal subsidy covers most of the per meal cost, but the price paid by most paying students covers only half of the per meal cost. School food service managers say that in order to appeal to students and raise revenues, they need to offer less nutritious a la carte foods and vending snacks.

SNAP Certification Costs and Errors, 1989-2005: Final Report. Preventing and detecting certification errors in SNAP is a major policy concern. In 2005 the cost of overpayments was \$1.29 billion, about 4.5 percent of the \$28.6 billion in benefits issued. This report examines the State-level relationships between SNAP certification error rates and certification expenditures, program policies, caseload characteristics, and economic conditions. The results show that, during the study period of 1989-2005, a ten percent increase in certification "effort"—about \$35 per participating household—would reduce an index of certification errors by 2 percent (0.3 percentage points out of a mean of 15.1 percent). The effect of certification effort was significantly smaller between 1997 and 2002, when States were implementing welfare reform. Key simplification policies authorized by the 2002 Farm Bill were estimated to jointly reduce the error index by 4.4 percentage points.

Effect of State SNAP and TANF Policies on SNAP Participation. The effectiveness of SNAP depends on the extent to which it reaches those who are entitled to benefits. In the mid- to late 1990s, participation fell sharply. In recent years, it rebounded somewhat, reaching 65.1 percent in 2005. Changes in participation patterns can be attributed partly to economic fluctuations, but they were also shaped by the rapidly changing State policy environment. This study combines data from the Survey of Income and Program Participation, 1996-2003, with data on State-level SNAP, welfare, minimum wage, and Earned Income Tax Credit policy to investigate the effects of policy on SNAP participation. The findings show strong evidence that some SNAP policy reforms made after 1999 (such as more lenient vehicle-exemption policies, longer recertification periods, and expanded categorical eligibility) increased SNAP participation. The use of biometric technology, such as fingerprinting, however, lowered participation. The study shows less consistent evidence that more lenient immigrant eligibility rules, simplified reporting, Electronic Benefit Transfers, or outreach spending raised SNAP participation.

Impact of 2002-03 Farm Bill Restorations on SNAP Use by Legal Immigrants. This study used 1999-2004 Current Population Survey data in conjunction with the Urban Institute's Transfer Income Model (TRIM3) to quantify the impact of the 2002 Farm Bill's eligibility restorations. About half the estimated impact came from increases in newly eligible families, while the rest came from increases in eligible family members within already-eligible families (usually within families with citizen children). By 2004 the restorations had extended eligibility to roughly one million legal immigrants and 148,000 additional families. The extension in eligibility reached around two-thirds of those made ineligible by the 1996 welfare reform law rules and not covered by the 1998 restorations. The estimated participation gain over the period was 780,000 individuals and 139,000 legal immigrant families. The restorations took place in an era of large increases in SNAP caseloads overall; even so, the share of families containing legal immigrants increased substantially.

<u>Tracking Trends in U.S. Food Consumption</u>. ERS maintains the U.S. per capita food consumption data system. This system is an important statistical indicator that tracks food and nutrient availability from 1909. The data facilitate policymaking and regulatory decisions about farm assistance programs, nutrition education, public health programs, and regulation of vitamin and mineral fortification and food labeling. The system is regularly updated as new data becomes available. ERS researchers publish reports on U.S. food consumption patterns using the database on a regular basis.

Consumer Data and Information Program (CDIP). ERS continued development of a consumer and data infrastructure needed for analyses of food policy issues. CDIP efforts focused on improving ERS's Food Availability Data System, obtaining information on Americans' time use on eating and preparing food using the Bureau of Labor Statistics American Time Use Survey, gathering information on consumer knowledge about diets and health as well as economic content using the National Health and Nutrition Examination Survey (NHANES), and understanding the characteristics of proprietary datasets. ERS initiated an effort to make the data collected through NHNAES more readily available to researchers, and launched a new effort to design the content of the 2009-10 module for NHANES. To support price analysis and consumer food choice behavior, ERS continued the acquisition and use of Nielsen's Homescan data on packaged and random weight food purchases.

Food Availability (Per Capita) Data System. The ERS food availability (per capita) data system includes three distinct but related data series on food consumption. The data serve as popular proxies for actual consumption. Food availability data are now available through 2007 at the national level. Also included are data on nutrient availability in the food supply and data on loss-adjusted food availability. This latter data series uses dietary recommendations from the 2005 Dietary Guidelines for Americans and its supporting guidance document MyPyramid Plan. ERS annually calculates the amounts of several hundred foods available for human consumption in the United States. The data are available at the national level only (State, city, or regional data, for example, are not available). This data series provides estimates, for example, of the pounds of beef available for domestic consumption per capita per year. The data are available on an annual basis. Most data extend back to 1909.

Protect and Enhance the Nation's Natural Resource Base and Environment

Current Activities:

ERS is exploring a range of agri-environmental program designs, including multi-objective, multi-instrument approaches. Policy objectives may include farm income support. Focus is on subsidy programs, land retirement, wetland restoration, market-based approaches and compliance mechanisms to address soil erosion, nutrient runoff, and wildlife habitat concerns. Alternate program designs will be analyzed in terms of government cost, overall cost-effectiveness, and distribution of costs and benefits (overall and within the farm sector). ERS continues to research the two primary working lands programs—the Environmental Quality Incentives Program and the new Conservation Security Program—individually and in combination. That project fills a large gap in the knowledge base relating to the implications of the myriad decisions necessary to design a working lands program.

Understanding the economic, demographic, resource and climate issues that affect the adoption of conservation practices is important to the design of cost-effective conservation programs. Both economic incentives and producer and household characteristics are important. Because many producers' economic environment is heavily influenced by Federal programs and policies, this project seeks to simultaneously assess conservation program participation and conservation practice adoption while controlling for the effect of commodity policy and related compliance requirements.

Selected Examples of Recent Progress:

<u>Privately Funded Conservation: What Can Farmers Sell?</u> Farmers produce a variety of goods and services for which markets generally do not exist, including improved water quality, carbon sequestration, wildlife habitat, open space, and water supplies. A recent ERS report on the use of markets to increase private investment in environmental stewardship identified the environmental services different types of farmers could provide, and identified impediments to market formation. Case studies examined in the report included water quality trading, carbon markets, wetland restoration, and recreation on Conservation Reserve Program lands.

"Green Payments" in Agriculture. A recent ERS report addresses the potential advantages and disadvantages of linking commodity and conservation programs into a single policy tool. The research examined the distribution of income support and environmental gains from various scenarios combining the income support objective of existing commodity programs and environmental objectives of existing USDA conservation programs. Because commodity and conservation payments tend to go to different producers on different types of land, scenario outcomes varied. Conservation-based payments yielded larger environmental gain and substantial income support, although the distribution of income support across farms differed markedly from that of current commodity programs.

Program Assessment Rating Tool (PART) Assessments:

ERS' entire economic research and analysis program was assessed with the Office of Management and Budget (OMB's) PART for the FY 2007 budget. The overall program rating was "effective." PART findings concluded that ERS ensures its research quality through internal and external peer reviews, and customer satisfaction with ERS products has been at or above target levels. The PART assessment recommended that (1) ERS continue to track the measures that have only baseline or partial data to ensure that performance is improving or remaining on target, and (2) ERS determine the impact of research by surveying users on the extent to which they find ERS products useful in decision-making.

ERS is undertaking activities to track its performance measures and to continue surveying customers about the usefulness of ERS products in decision-making. ERS has completed all follow-up actions associated with OMB's PART recommendation to survey customers about the usefulness of ERS products. ERS continues to assess customer use of and satisfaction with ERS products using the Policy Official Satisfaction Survey. Customer satisfaction ratings continue to run well above target levels (95 percent versus a target level of 82 percent).

ERS has also completed all follow-up actions associated with OMB's PART recommendation to continue to monitor ERS performance measures that have only baseline or partial data. This recommendation applies to the following performance measures: Policy Official Satisfaction Survey, Portfolio Review Score, and American Customer Satisfaction Index (ACSI) Customer Satisfaction Rating.

- O Policy Official Satisfaction Survey: ERS continues to assess customer use of and satisfaction with ERS products using the Policy Official Satisfaction Survey. Data for this annual performance measure show that ERS customer satisfaction ratings continue to run well above target levels (95 percent actual versus a target of 82 percent).
- O Portfolio Review Score: ERS continues detailed planning for the annual program review. The Resource and Rural Economics Program at ERS was reviewed by an external expert panel at the end of FY 2007. The panel review for the program area resulted in a performance rating of "excellent." One result of the program review is that annual data will be generated for one of ERS's long-term performance measures "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."
- O ACSI Customer Satisfaction Rating: As part of a regular cycle of customer satisfaction surveys based on the ACSI, ERS surveyed its customers in 2005. Customer satisfaction levels were found to exceed government averages and were above the ERS target level. Another survey was conducted in 2008, with little change in average scores from 2004. Future surveys of overall customer satisfaction are planned for 2011.

ECONOMIC RESEARCH SERVICE

Summary of Budget and Performance Statement of Goals and Objectives

ERS has six strategic goals. To achieve these goals, 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.

Agency Strategic Goal	Agency Strategic Objectives	Programs that contribute	Key Outcome
Agency Strategic Goal 1: Enhance international competitiveness of American agriculture.	Objective 1.1: Provide economic research, information, and analysis to support public and private decision making to help expand and maintain international export opportunities.	Economic Research and Analysis.	Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues affecting the U.S. food and agriculture sector's international competitiveness, including factors related to international trade agreements and negotiations, market and nonmarket trade barriers, and the effects of economic and technological developments on agricultural competitiveness.
Agency Strategic Goal 2: Enhance the competitiveness and sustainability of rural and farm economies.	Objective 2.1: Expand domestic market opportunities. Objective 2.2: Provide analysis to enhance the efficiency of domestic agricultural production and marketing systems. Objective 2.3: Provide economic analysis of risk and financial management to farmers and ranchers.	Economic Research and Analysis.	Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues affecting the U.S. food and agriculture sector's competitiveness, including factors related to performance, structure, risk and uncertainty, and marketing.
Agency Strategic Goal 3: Support increased economic opportunities and improved quality of life in rural America.	Objective 3.2: Expand economic opportunities in rural America by bringing economic insights into public and private decision making.	Economic Research and Analysis.	Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of economic issues affecting rural development, including factors related to farm finances and investments in rural people, businesses and communities, and of economic issues relating to the performance of all sizes of American farms.

Agency Strategic Goal	Agency Strategic Objectives	Programs that contribute	Key Outcome
Agency Strategic Goal 4:	Objective 4.1: Provide	Economic Research	Enhanced understanding by policy makers,
Enhance protection and safety of the Nation's agriculture and food supply.	economic research and analysis of public and private efforts to reduce the incidence of food borne illnesses related to meat, poultry, and fresh produce in the U.S. Objective 4.2: Support efforts to reduce the number and severity of agricultural pest and disease outbreaks through economic analysis of control strategies.	and Analysis.	regulators, program managers, and those shaping public debate of economic issues related to improving the efficiency, efficacy, and equity of public policies and programs designed to protect consumers from unsafe food.
Agency Strategic Goal 5: Improve the Nation's nutrition and health.	Objective 5.1: Provide economic research and analysis of public and private efforts to ensure access to nutritious food. Objective 5.2: Provide economic research and analysis of options to promote healthier eating habits and lifestyles. Objective 5.3: Improve food program management and customer service through economic evaluations of USDA's nutrition assistance programs.	Economic Research and Analysis.	Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of economic issues related to the nutrition and health of the U.S. population, including factors related to food choices, consumption patterns at and away from home, food prices, nutrition assistance programs, nutrition education, and food industry structure. Such understanding underpins the capacity to ensure equitable access to a wide variety of high quality, affordable food.
Agency Strategic Goal 6: Protect and enhance the Nation's natural resource base and environment.	Objective 6.1: Provide economic intelligence, research and analysis to inform agricultural resource and conservation policies. Objective 6.2: Provide economic research and analysis to support public and private efforts to improve management of private lands and ecosystems.	Economic Research and Analysis.	Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues related to development of Federal farm, natural resource, and rural policies and programs to protect and maintain the environment while improving agricultural competitiveness and economic growth.

Selected Accomplishments Expected at the FY 2010 Proposed Resource Level:

ERS will identify key economic issues relating to the competitiveness of U.S. agriculture, use sound analytical techniques to understand the immediate and broader economic and social consequences of alternative policies and programs and the effects of changing biofuel and macroeconomic market conditions on U.S. competitiveness, and effectively communicate research results to policy makers, program managers, and those shaping the public debate regarding U.S. agricultural competitiveness.

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 policymakers and decision-makers. These activities will include conducting research to fully comprehend and articulate the effects of trade agreements, political and economic structural changes, and technological developments on the international comparative and competitive advantage of U.S. agriculture.

ERS plans a range of activities to provide policymakers and other decision-makers with assessments of current programs and alternative outcomes for pending or prospective policy decisions. Results will help shape the public debate on economic, trade, and biofuel policy issues affecting the food and agricultural sector. These activities will include the following:

Agriculture and the Global Economy. Changes in the macroeconomy have major effects on agriculture. The main factors linking the macroeconomy to agriculture are exchange rates, consumer income, rural employment, and interest rates. Ongoing ERS research focuses on effect of changes in economic growth, exchange rates, and financial markets on U.S. trade with developed and developing economies.

International Trade Agreements Negotiation and Trade Policy. A continued priority is to support analyses related to World Trade Organization (WTO) negotiations under the Doha Development Agenda, other WTO issues, and bilateral trade agreements. The project activities identified are to respond to critical questions of trade negotiators, policy analysts, and decision-makers, to undertake and disseminate research on key trade policy issues, and to continue to build ERS analytic capacity – economic models, data, and expertise.

<u>China, Brazil, and India</u>. China, Brazil, and India represent three countries that will shape global agricultural markets of the 21st century and where large uncertainties exist about future demand, supply, and policy directions. ERS is analyzing key markets and policy issues that will shape the size and pattern of the three countries' agricultural trade, with a focus on major U.S. agricultural exports and imports.

<u>International Dimension of Biofuels</u>. High oil prices have enhanced the motivation for governments around the globe to promote biofuels policies based on agricultural feedstocks to: 1) become less dependent on petroleum imports, 2) increase income to farmers, and 3) improve the environment by burning biofuels in place of hydrocarbons. ERS is analyzing the interaction between domestic and global biofuel initiatives and their cross-commodity impacts on global agricultural markets.

ERS research and analytical activities are designed to enhance policymakers' and other decision-makers' understanding of economic issues affecting the U.S. food and agriculture sector's competitiveness, expand domestic marketing opportunities, enhance agricultural production efficiency, and improve effective risk management.

ERS will identify key economic issues related to the competitiveness and sustainability of rural and farm economies. ERS will use sound analytical techniques to understand the immediate and broader economic and social consequences of alternative policies and programs and the effects of changing biofuel and macroeconomic market conditions on rural and farm economies. ERS will effectively communicate

research results to policymakers, program managers, and those shaping the public debate on the U.S. farm economy. These activities will include the following:

- 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 foodservice industries.
- Conducting economic research on and ascertaining the impacts on commodity markets of new food
 and nonfood uses, new agricultural and forest products, new food products, alternative fuels, and new
 processes and other technologies that add value.
- 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.

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 policymakers and decision makers. These activities will include the following:

Assessment of Agricultural Policy. The 2008 Farm Act introduced several new support programs and modified the provisions of several continuing commodity programs. ERS research will examine key economic issues pertaining to these commodity programs with the aim of understanding the likely impacts of these new and modified programs on production, program participation, budgetary expenditures, and local economies. Two examples of expected analysis include the average crop revenue election program and the pilot planting flexibility program.

Economics of Biofuels. ERS research on biofuels is focusing on domestic and global agricultural market impacts, as well as economy-wide, regional, and household effects of increased bioenergy production. Continued growth of grain-based ethanol production, and the prospect of commercializing ethanol from other sources of biomass, underscores the need for both short-run and longer-term perspectives. With ethanol accounting for approximately 30 percent of domestic corn utilization, corn use for ethanol is sustaining higher prices for both corn and competing crops, with implications for downstream users. Domestic livestock industries and foreign buyers, for example, will be pushed into more intense competition for available feed grains. Issues affecting U.S. competitiveness and other facets of the agricultural economy will be examined under this priority research project.

The Geography of Food Distribution in the United States. This research will examine the complex relationships that tie the economic activities of 24 million workers across the country to produce and market food products to over 280 million American consumers. A national system account of economic regions will provide a comprehensive description of the linkage between domestic and global food and commodity markets, and form the basis for analysis on alternative policies and programs to enhance competitiveness of our food distribution system.

<u>Changing Structure of U.S. Livestock Sector</u>. Research will examine the significant changes occurring in the U.S. livestock production sector. Research will use the livestock versions of the Agricultural Resource Management Survey (ARMS) to measure changes in structure of production, effects of productivity changes, and manure management.

Economics of U.S. Local Food Markets. To better understand the local food phenomenon, ERS will conduct a study on the economics of local food markets. The study has four major objectives: (i) to describe the local foods movement and associated policy issues; (ii) to quantify the current state of local food markets; and (iii) to characterize marketing activities associated with local food sales and gain insight into potential barriers to expansion of local food markets; and (iv) to identify economic issues for further analysis. A focus involving food assistance research is exploration of the role of school food purchases in the market for local foods.

Forecast of Farm Income, Assets and Debt. Estimates of farm income, assets and debt are developed and presented at the Agricultural Outlook Forum. An estimate of value-added to the U.S. economy by the production of farm goods and services is also estimated. Updated income and balance sheet forecasts are developed and reflect the most recent information available on production, prices and quantities of crops and livestock and products and other outputs and services generated from farms. The updates will also reflect inputs consumed in production. Updates include disaggregated value-added/farm income account information to the Bureau of Economic Analysis' National Income Staff for their use in developing their estimates of Gross Domestic Product and National Income Accounts and their estimates of Personal Income and Outlays, and Corporate profits.

<u>Food Related Energy Use in the United States: Will the Growth Trend Continue?</u> Energy use in the U.S. food system is continuing to increase as a share of the national energy budget, even as inflation adjusted energy prices have more than doubled. ERS will examine food system technologies, eating habits, and food related energy use to aid our understanding of future energy needs.

How Much and How Quick? Pass-through of Commodity and Input Cost Changes to Retail Food Prices. This project will use Bureau of Labor Statistics (BLS) price index data across various stages of food production to estimate how much of the change in commodity costs is passed through to retail prices, and, just as important, estimate the time lag between commodity price changes and retail price changes across a number of food groups.

<u>CPI for Forecasting and Analysis</u>. ERS continually tracks changes in retail food prices through the use of BLS historical data, news from the retail food industry, and changes in the food supply/production system. This analysis is updated on the ERS website on a monthly basis and also shared with media, industry analysts, and other researchers on an ongoing basis.

<u>Economic Implications of Expanded Organic Production</u>. ERS plans to analyze the market implications of increased consumer demand for organic meat and dairy products, and to address related issues associated with the economic and policy issues related to U.S. livestock production.

<u>Profile of Farm Workers</u>. ERS recently updated its profile of the farm worker population and will continue to study implications of changes in farm labor and immigration policy.

<u>Evaluation of Public Agricultural Research Benefits</u>. ERS will continue studying options for evaluating public agricultural research benefits, examining trends in public agricultural research, and exploring changes in the sources and composition of public and private funding.

<u>Market Analysis and Outlook</u>. Several initiatives will increase the quality, transparency, and accessibility of the data and analysis for the support of the USDA short- and long-term projections of U.S. and world agricultural production, consumption, and trade. An ongoing initiative seeks to provide users with more options in the delivery of timely data, such as a query format and a variety of output formats.

Management of Financial Assets in Farming. This project examines farm debt sources and uses, constraints on credit availability, and the liquidity management practices of farmers. The role of debt in farm financial structure will be measured; principal suppliers of debt capital identified, purpose of debt use examined, and claim on farm earnings measured.

ERS research and analytical activities are designed to enhance understanding by policymakers, regulators, program managers, and organizations that shape public debate of economic issues affecting rural development. The issues include factors related to farm finances and investments in rural people, businesses, and communities. The activities are also designed to enhance understanding of economic issues related to the performance of all sizes of American farms.

ERS will identify key economic issues related to rural economic development and farm viability. ERS will also 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. ERS will effectively communicate research results to policymakers, 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 will include the following:

- Developing a comprehensive, integrated base of information on rural economic and social conditions
 that can be used by Federal policymakers for strategic planning, policy development, and program
 assessment
- Analyzing how investment, technology, employment opportunities and job training, Federal policies, and demographic trends affect rural America's capacity to prosper in the global marketplace.
- Conducting research to identify social and economic issues facing rural communities as they adjust to broad forces affecting their futures, such as changing farm policy, welfare reform, increased foreign competition in low-wage industries, growing demand for highly skilled labor, an aging population, and rapid growth in communities near major cities.
- 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.

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 policymakers and decision makers. These activities will include the following:

Impact of Alternative Farm Policy Approaches on Farms and Farm Households. Data from the Agricultural Resource Management Survey will be used in conjunction with sector-wide models to examine the effects of changes in farm policies and economic conditions on different types of farms and households that operate farms as a part of their economic portfolio.

<u>Understanding Rural America</u>. ERS will continue to conduct research on the rural impacts of migration and population change, economic restructuring, job skills and education, poverty, health, ethnic diversity, and natural amenities. In order to improve the accessibility and usability of our major research findings, ERS will continually update the Rural-at-a-Glance series of reports.

<u>Broadband Access in Rural Communities</u>. Internet use has expanded rapidly, but broadband access has been less for rural communities than for urban ones. ERS will examine the economic impact of broadband Internet service on rural communities.

ERS research and analytical activities are designed to enhance understanding by policymakers and other decision-makers of economic issues related to improving the efficiency, efficacy, and equity of public policies and programs aimed at protecting consumers from unsafe food.

ERS will identify key economic issues related to protecting consumers from unsafe food and the food supply from contamination. ERS will also use sound analytical techniques to understand the immediate and long-term efficiency, efficacy, and equity consequences of alternative policies and programs aimed at ensuring a safe food supply. ERS will effectively communicate research results to policymakers, program managers, and those shaping efforts to protect consumers from unsafe food. Examples of these activities will include the following:

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 the public and decision-makers with food safety and biosecurity information through
 publications, Web materials, and briefings that address several economic aspects 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 foodborne illness data related to meat, poultry, and egg products and to develop more accurate measures of the effectiveness of regulatory strategies in reducing preventable foodborne illness.
- Conducting research on consumer awareness of and attitudes toward food safety risks in order to support education and outreach efforts and to improve understanding of the consumer benefits of various regulatory actions.
- Expanding research, modeling, and data sources that aid in analyzing emerging, potentially high-risk threats to public food safety and U.S. agriculture.

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 policymakers and decision-makers. These activities will include the following:

Economic Cost of Foodborne Campylobacter Infections. Previous cost estimates have underestimated the economic cost of illness due to Campylobacter and Salmonella by omitting certain chronic diseases caused by these pathogens, notably reactive arthritis (ReA), irritable bowel syndrome (IBS), and inflammatory bowel disease (IBD). In collaboration with the Centers for Disease Control and Prevention (CDC), ERS will improve estimates of the annual cost of foodborne Campylobacter infections and include the additional costs due to ReA, IBS, and IBD. The analysis will use CDC's forthcoming update of the annual number of Campylobacter cases and published estimates of the risk of Campylobacter-associated ReA, IBS, and IBD and the economic cost of each disease.

New Estimates of the Societal Costs of Foodborne Illness. Economists have made great strides in estimating values for risks and product attributes not readily observable in the marketplace. Valuation for food safety risks, however, has lagged and new results of well-designed consumer surveys are now available for the first time. ERS funded two consumer surveys to address this specific issue of valuating reduction in risk of foodborne illness for both morbidity and mortality risks. This project combines the results from both consumer surveys and presents the implications for ERS' estimates of the societal costs of foodborne illness. New CDC estimates of the incidence of foodborne illness in the United States will also be incorporated into the estimates.

The Impacts of Food Safety Information on Meat Demand. This research will investigate whether publicized food safety information on beef, pork, and poultry have impacted meat demand. Weekly and monthly household data on meat purchases collected by the A.C. Nielsen Company will be aggregated for beef, pork, and poultry commodity level analysis. By using this high-frequency data, short periods of decline and recovery in meat demand can be estimated. Consumer reactions to food safety information will be explored using indices of media attention to safety for each meat product.

Animal Disease. Over the past few years, disease has repeatedly drawn attention to animal agriculture, both in the United States and globally. Outbreaks of foot-and mouth disease, avian influenza and Bovine Spongiform Encephalopathy (Mad Cow Disease) have impacted the livestock and poultry industry worldwide. To better understand the future of the industry, ERS researchers will examine the development of regulations to control animal disease, assess secondary impacts on feed industries, and estimate the market impact of potential for catastrophic events in all segments of animal agriculture. One effort will present a modeling framework in which epidemiological model results are integrated with an economic model of the U.S. agricultural sector to estimate the economic impacts of livestock disease outbreaks. Another project will examine the role of wildlife in propagating animal disease and efficient strategies to target control efforts.

ERS research and analytical activities are designed to enhance understanding by policymakers, regulators, program managers, and organizations shaping public debate of economic issues relating to the nutrition and health of the U.S. population, including factors related to food choices, consumption patterns at and away from home, food prices, nutrition assistance programs, nutrition education, and food industry structure. Such understanding underpins the capacity to understand and react to issues surrounding obesity, homeland security, and the responsiveness of the food system to consumer demands in a timely, effective manner.

ERS will identify key economic issues affecting food prices and food consumption patterns; use sound analytical techniques to understand the immediate and broader economic and social consequences of the changing structure of the food industry and of policies and programs aimed at ensuring consumers equitable access to affordable food and to promote healthful food consumption choices; and effectively communicate research results to policymakers, program managers, and those shaping the public debate regarding healthful and nutritious diets. Examples of these activities will 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 enhanced 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 evaluations and economic analyses of the impacts of the Nation's domestic nutrition
 assistance programs, including the Food Stamp Program (FSP); the Special Supplemental Nutrition
 Program for Women, Infants, and Children (WIC); the School Lunch Program; 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.

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 policymakers and decision makers. These activities will include the following:

Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Their Consequences. Concerned that some areas have become 'food deserts'—areas with limited access to affordable and nutritious foods, particularly low-income communities—Congress, in the 2008 Farm Bill, requested that the Department of Agriculture conduct a study on the topic. ERS is taking the lead in conducting this study, with assistance from the Food and Nutrition Service (FNS) and the National Institute of Food and Agriculture (NIFA). This study draws from contributions by an inter-divisional team of ERS researchers who are examining the prevalence, causes, and consequences of areas with low access to affordable and nutritious food. The study also involves non-ERS researchers including the National Poverty Center, the Institute of Medicine, and other USDA agencies (FNS and NIFA). This study will produce a report to Congress.

<u>Valuing Food Loss</u>. ERS will improve estimates of what and how much Americans are eating. One way to estimate consumption is through the amount of food available for consumption, specifically ERS's Loss-Adjusted Food Availability data. This data series incorporates assumptions about food loss (e.g., moisture loss, spoilage) in different stages of the food production, marketing and consumption chain. Valuing this

food loss is the central theme of what we informally refer to as the "loss paper," which looks closely at the amounts of fruits and vegetables lost in the system (i.e., not available for consumption) and places a value on these losses. The price data will also be used to update the 2004 ERS report, *How much do Americans pay for fruits and vegetables?*

Consumer Welfare Effects of Increased Food and Energy Prices. The recent high prices for food and energy—two basic living expenditures competing for consumers' budgets—have eroded the average American's purchasing power, especially low-income households because of their larger share of spending on food and energy. This study estimates a complete demand system including food and energy as separate categories, exploring the dynamics and interrelationships of consumer demand. The estimated demand system is then used as a framework to analyze how increased food and energy prices would affect consumer welfare, especially for the poor.

Measuring the Effect of Eating Food Away From Home (FAFH) on Diet Quality. ERS will use the Healthy Eating Index, developed to incorporate the changes made to the 2005 Dietary Guidelines, to score food consumed at home and food consumed away from home in two nationally representative surveys that span over ten years; ERS will also to compare the effect of FAFH across time and across population subgroups.

Food Availability (Per Capita) Data System. ERS is the sole source for continuous data on U.S. food consumption, a critical component of U.S. nutrition monitoring efforts. ERS tracks historical national aggregate consumption of several hundred basic food commodities each year (back to 1909 for many foods). The series includes a dataset that uses aggregate food supply data, adjusts for losses in the home and elsewhere, and converts the remaining supply into servings and calories. The series is revised and updated annually in a data product titled Food Availability (Per Capita) Data System.

<u>Price and Advertising Effects on U.S. Household Purchase Choices of Nonalcoholic Beverages</u>. The relationships between household demographic characteristics for purchases of nonalcoholic beverages are important. This project will combine previous research with advertising expenditure data collected by ADViews to determine the effects of price, advertising, coupon use, and other variables on household purchase choices for various nonalcoholic beverages.

Assessing the Affordability of Healthful Food. Much of the debate over the reasons for the rise in overweight and obesity in the United States has focused on the cost of healthful food—with some arguing that low-income households cannot afford healthful food and others insisting that even for low-income households cost is not a barrier to a healthful diet. This project will investigate the role of cost/price on food choices. This investigation will seek to answer two questions: (1) Can Americans afford a healthful diet? and (2) Are cheap "unhealthy" foods driving expensive "healthy" foods out of the American diet?

<u>U.S. Organic Food Market: Some Demand Perspectives</u>. ERS will determine who buys organic food and at what price premium. Discrete binary choice models will be used to identify important consumer characteristics affecting the decision to purchase organic foods. Hedonic pricing analysis will be conducted on over 30 individual fruits and vegetables, fluid milk by census region, and baby food to determine premiums and discounts associated with market factors and product characteristics focusing on the organic attribute. Additional descriptive analyses of trends in each organic sector will include organic shares of sales, as well as, intra-industry growth and distribution.

<u>Local Food Markets</u>. In recent years, consumer awareness of, and interest in food that is locally grown and purchased, has increased sharply. ERS has initiated a project to study the economics of local food markets by quantifying the current state of local food markets, characterizing market activities associated with local food sales, and examining potential barriers to expansion of local food markets.

<u>Consumer Data Initiative</u>. ERS is conducting several research activities using information gathered under the Consumer Data Initiative:

- ERS is collaborating with the Community Nutrition Research Group at the Agricultural Research
 Service to develop the Food-Commodity Economic Database (FCED), a food-commodity database for
 the 1999-2004 National Health and Nutrition Examination Survey (NHANES), followed by efforts to
 modify the database for earlier food intake data to support trend analyses of commodity use.
 Preliminary FCED data was available in late 2008, and Web-based access will be widely available in
 late 2009.
- ERS is collaborating with the National Center for Health Statistics to field a Flexible Consumer
 Behavior Survey (FCBS) as a supplement to the NHANES. The FCBS will capture additional
 information from NHANES respondents to explain consumer dietary behavior and assess the impact of
 USDA's food assistance and nutrition education programs. ERS reviewed the 2007 data. Currently
 work is under way to create a secure ERS data enclave to provide wide access to ERS researchers.
- ERS continued conducting formative research for the development of a set of subjective questions that could ultimately form the basis of a behavioral module to be added to standard consumption and health surveys, such as NHANES. A University of Chicago research grant supports the development of a set of questions on the psychological factors driving food choices. This behavioral module would support ERS research by filling the need for information on the behavioral and psychological causes of poor diets and obesity in the United States.

<u>U.S. Demand for Fruits and Vegetables</u>. The 2005 *Dietary Guidelines for Americans* calls for increased intakes of fruits and vegetables because diets rich in fruits and vegetables are likely to reduce the risk of many chronic diseases. Some studies, however, indicate that the prices of fruits and vegetables are relatively higher than other foods, causing less fruit and vegetable consumption, especially for the low-income households. This study will examine how price and income affect fruit and vegetable consumption. This study will also examine the patterns of U.S. fruit and vegetable imports and their effects on the American diets.

SNAP Over the Business Cycle: An Automatic Stabilizer Providing a Fiscal Stimulus When Needed. This project uses an Input-Output Multiplier (IOM) model for analyzing the impact of the food stamp program on the U.S. economy. The work will utilize an updated database and, compared with previous uses of the IOM, the model will be specified more flexibly in how it can be used to analyze the economic impacts of food assistance programs.

The Role of Income Volatility in Food Stamp Participation. Using data from the Survey of Income and Program Participation, this project examines the relationships between poverty, Food Stamp Participation, and earnings volatility. The work will decompose earnings volatility for low-income households to see how many households experience high frequency changes in employment or wages versus high intensity changes. It will analyze how to better predict the effect of earnings volatility on food stamp program participation, positing that it depends on the underlying distribution of volatility types. The analyses can help explain earlier findings that food stamp benefits do not appear to reduce monthly poverty more than they reduce annual poverty.

<u>Food Spending and Food Security</u>. Volatility in housing prices and food prices over the past few years have resulted in substantial shifts in expenditure shares in these categories for middle- and low-income households. This project will document these shifts using BLS expenditure statistics and Child Protective Services -Food Security Supplement food spending data and will examine contemporaneous changes in household food security. The household-level relationships between reported food spending, reported minimum food spending needed, the cost of the Thrifty Food Plan, and food security will also be examined.

<u>Expanding the School Breakfast Program (SBP)</u>: <u>Benefits and Costs</u>. This project explores available evidence about the benefits and costs of SBP expansion. Benefits are defined as the nutritional, cognitive,

and academic outcomes that can be attributed to participation in the program, as opposed to eating breakfast in general. This is important because many children may substitute breakfast at school for breakfast at home; the actual increase in children eating breakfast will likely be smaller than the number of children eating breakfast at school. Costs are studied in terms of fiscal costs to the Federal government and costs to school food service, as well as potential adverse outcomes, such as the possibility of increased overweight associated with program participation.

<u>Dynamics of Household WIC Participation</u>. This study uses the Early Childhood Longitudinal Study to examine the dynamics of household participation in the WIC program from a mother's pregnancy through the survey child's first birthday. The use of rich panel survey data allows for the examination of the factors that are associated with a household's entry into and exit from WIC. Information on those who are eligible for WIC but either delay participation or exit early from the program, is important to understanding whether the program is operating effectively and can inform policy efforts to encourage more prolonged participation among the most vulnerable households.

Analyze the Costs of the School Lunch Program. This study will evaluate the impact that region; type of metropolitan area, e.g. urban, type of school meal plan, and other variables have on the costs of providing school lunches. Results will provide cost information to policy makers about appropriate reimbursement rates that account for regional differences in costs. Methods used include econometric analysis and synthesis of previous research, using survey data collected under the Food Assistance and Nutrition Research Program and data from the National Education Center and the Census Bureau.

Structural Change in the Food Stamp Program (FSP) Caseload Equation. Historically, FSP caseloads are positively correlated with aggregate economic activity as measured by the unemployment rate. This relationship is useful in explaining fluctuations in FSP caseloads and predicting future caseload levels and budget requirements. Over time, however, the quantitative relationship between FSP caseloads and the unemployment rate appears to have reversed itself qualitatively, with increasing FSP caseloads associated with declining unemployment rates. The changing nature of the relationship between FSP caseloads and the unemployment rate raises questions about the usefulness and reliability of this relationship in explaining period-by-period changes in FSP caseloads. The study will evaluate the ability of regressions of the FSP caseload equation that includes measures of economic activity (the unemployment rate and total non-farm employment) to explain year-to-year changes in FSP caseloads.

WIC Vendor Cost-Containment: Markets, Competition, and Program Costs. Considerable controversy surrounds the impact of WIC-only vendors participating in the WIC supplemental foods program. WIC-only stores attract participants by restricting items carried to only authorized WIC foods. Most WIC-only stores redeem vouchers—item prices may not be indicated—and they may not accept cash. As a result, WIC-only stores are isolated from typical market forces which determine prices in the commercial retail food sector. This report will examine the economic issues surrounding the determination of competitive markets, prices, and peer groups, and, using empirical data, will assess the impact of alternative scenarios on State agency program costs.

ERS research and analytical activities are designed to enhance understanding by policymakers, regulators, program managers, and those shaping public debate of economic issues related to developing Federal farm, natural resource, and rural policies and programs that 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 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 will effectively communicate research results to policymakers, program managers, and those shaping public debate on agricultural resource use

and environmental quality. ERS supports the USDA programs crosscut through its research on how economic issues affect farmers' choices among alternative pest management practices and technologies.

Examples of these activities will include the following:

- Characterizing changes in land management and shifts in agricultural land use—particularly the
 movement of land into and out of crop production—and the economic and environmental effects of
 these changes, including impacts on carbon sequestration, soil erosion, biodiversity, and nutrient
 management. Determining what economic and policy factors have prompted shifts between crop
 production and other land uses.
- Assessing the extent and spread of contracting and other structural change in production agriculture
 and outlining the basic economics underlying why farmers and processors have made these changes.
 Summarizing evidence on the environmental and economic effects of contracting and highlighting
 emerging policy issues created by expanded contract use and structural change, including impacts on
 animal waste management.

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 policymakers and decision makers. These activities will include the following:

Enhancing Economic and Natural Resource Data for Agri-Environmental Policy Analysis. ERS will aim to provide a better means of information and data sharing in an effort to enhance collaboration, learn from each other's experiences, and create synergies in data merging efforts in order to link environment and agriculture research.

<u>Conservation on Working Lands</u>. ERS research will focus on programs that support conservation on actively managed farmland and study the impacts of eligibility rules, participation incentives, and rules for accepting (or rejecting) applications on the adoption of conservation practices.

Climate Change Mitigation and Adaptation. The ERS climate change research program will assess how farmers would respond to climate mitigation options such as carbon offsets, methane capture, and biofuel production. ERS will analyze the economic consequences of alternative mitigation policies, including market and non-market costs and the efficiency of various greenhouse control options, and the impact of mitigation options on domestic and global land and water use. The program will also focus on farmer and domestic and international market responses to a new climate regime, including the role of technologies and genetic resources.

Market Approaches to Providing Ecosystem Services. ERS will study how demand for environmental goods (ecosystem services) can be "focused" so that farmers can benefit financially for providing the goods to those willing to pay for them. Creating markets for environmental services could encourage the adoption of farming practices that provide cleaner air and water, and other conservation benefits. This project will identify the ecosystem services farmers could provide, identify impediments to market formation, and identify the roles government can play to help develop markets.

Summary of Budget and Performance Key Performance Outcomes and Measures

Agency Goal: The long-term performance goal for ERS is the successful execution 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 general discussion of performance measures follows.

Key Outcome: The key outcome of the ERS program is to inform and enhance public and private decision-making on economic and policy issues related to agriculture, food, the environment, and rural development.

Application of the Research and Development Investment Criteria at ERS

ERS research and management practices use many methods to apply the research and development investment criteria. These practices are designed to ensure that the direction of agency research activities reflects current and anticipated needs of ERS stakeholders and customers, that research and analysis produced by the agency adheres to disciplinary standards to ensure the highest possible quality, and that the agency's research products are delivered in a way that is accessible to customers.

Principal practices to ensure research quality

ERS staff publishes research and analysis in a variety of outlets, such as research monographs, ERS periodicals, journals, and presentations outside ERS. For all products the overriding objective is high quality economic analysis and communication of findings. Review and clearance is a collaborative process that begins with defining the questions and hypotheses to be investigated and selecting the appropriate methodologies. Official review and clearance guidelines are designed to ensure high quality analysis.

All products must meet disciplinary standards for quality and must receive substantive peer reviews by qualified experts who have the background, perspective, and technical competency to provide a meaningful assessment of the research design and findings. Reviewers are composed of a mix of individuals outside the author's immediate work unit and at least one from outside the agency. In addition, publications that involve other Federal programs must be reviewed by researchers/analysts from the relevant program agency.

ERS economic research and analysis includes extramural research activities through the Food Assistance and Nutrition Research Program (FANRP). FANRP's competitive grants and cooperative agreements fund research on strengthening economic incentives in food assistance programs; food assistance as a safety net; and obesity, diet quality, and health outcomes. The program is publicly announced, and grants and agreements are competitively awarded through the use of peer review panels.

Principal practices to ensure research relevance

ERS interacts with stakeholders and customers in many ways to ensure that the research agenda focuses on topics relevant to public and private decision makers. One example of such interaction centers on involving stakeholders in discussions of potential research issues relevant to a given area. ERS regularly convenes workshops, stakeholder sessions, or other meetings in which the results of recent agency research are discussed, upcoming policy issues are identified, and questions for future research are explored. In this way, interaction with stakeholders and customers helps sharpen the agency's research focus to better anticipate future needs for public and private decision makers. Another method to ensure relevance of agency research and analysis centers on ERS strategic planning processes. Strategic planning processes at ERS involve discussing with stakeholders the retrospective assessment of research accomplishments and agency impact, identifying key policy areas for potential future impact, and establishing research program priorities.

In addition to efforts to ensure the relevance of long-term research, ERS also asks customers to assess the relevance of staff analysis provided to USDA and other government officials. ERS uses a short questionnaire to gather feedback from customers about relevance, usefulness, timeliness, and accessibility of the product

delivered. The instrument provides valuable insight into the relevance of information from ERS in informing decisions by key policy makers.

Principal practices to assess performance: key performance measures

ERS employs several practices to assess performance of the agency's research program. These activities are designed to identify how ERS research contributes to discussion of issues in a sector, how effectively agency information is communicated to customers, and how the efficiency of the program can be improved.

Central to effective ERS performance is successful completion of planned research that enhances understanding by policy makers, regulators, program managers, and those shaping the public debate of economic issues related to enhancing economic opportunities for agricultural producers. Effective performance of economic research and analysis can be inferred through an integrated suite of measures designed to provide an indication of aspects of program performance. The key challenge for providing an overall assessment of research program performance is to develop a set of measures that, taken together, can provide a comprehensive view of program performance.

The framework for assessing the performance of the ERS economic research and analysis program centers on adherence to the Research and Development Investment Criteria principles of relevance, quality, and performance. Agency assessment practices provide a broad framework for assessing success in achieving these criteria. The degree of success can be further assessed through application of a quantitative performance assessment tool that considers factors key to successful research, based on relevance, quality, and performance. The tool consists of a three-category performance indicator that reflects the interval of the point score achieved on a quantitative research program assessment tool. A key component of evaluating agency performance in these areas will be program evaluation conducted by outside review panels. Panels assess the relevance, quality, and performance of agency programs by using the quantitative assessment tool based on the assessment criteria, which are summarized below. These criteria, taken together, will provide an indication of agency performance.

Data and other information collected for the ERS performance measurement framework are used to monitor, evaluate, and revise program activities and resource allocation to meet changing priorities in support of the ERS mission. ERS management regularly discusses implementation of research activities to ensure continued and improved agency effectiveness. The outcome of program review activities has been used as a basis for resource allocation and strategic planning activities for the food economics program and the market and trade economics program. The results of the American Customer Satisfaction Index (ACSI) customer survey indicate a customer priority for improving data accessibility and dissemination. These priorities are reflected in current activities to improve data dissemination via the ERS Web site. The results from the ACSI Web site customer satisfaction survey are used to inform initiatives to improve navigation on the ERS Web site.

ERS strategic planning activities include reviews of progress in meeting program plans and implementing revisions as necessary. Changes reflect activities to ensure continued relevance of ERS research and analysis activities, and to continue to provide useful and appropriate products to customers. ERS strategic planning includes discussions with customers and stakeholders on prospective research projects to meet anticipated needs of policy officials. Stakeholder conferences are used to help set priorities for ERS extramural funding programs. In FY 2010, ERS budget initiatives are aimed at responding to interests of ERS customers for continued relevant research, analysis, and data.

Portfolio Review Score

ERS uses independent expert review panels that evaluate the effectiveness of the ERS program of economic research and analysis to enable better informed decisions on food and agricultural policy issues. Over the past four years, review panels have assessed major segments of the ERS program. In each review, the external panels assess the relevance, quality, and performance of program plans, activities, and accomplishments. This assessment includes an evaluation using a quantitative analysis tool to rate portfolio effectiveness on a multicategory scale (excellent, adequate, needs improvement). The panel recommendations are used in agency strategic planning and priority setting.

Performance Measure	FY 2005 Actual	FY 2006 Actual	FY 2007 Actual	FY 2008 Actual	FY 2009 Target	FY 2010 Target
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	Excellent	Excellent
ACSI Customer Satisfaction Rating	75	n/a	n/a	74	n/a	n/a
Policy Official Satisfaction Survey	97	96	95	95	95	95
Percent of requested analysis delivered on time	95	97	95	96	100	100
Customer satisfaction with the ERS Web site	72	72	71	70	74	74

ACSI Customer Satisfaction Rating

This measure is designed to assess the satisfaction of private and other external customers with the relevance, usefulness, and accessibility of ERS research, data, and analysis, as measured by the ACSI. This measure tracks relevance and usefulness of ERS research, analysis, data products, and services, as determined through a survey of agency customers using the ACSI. The survey is conducted on a three year cycle. In 2005 ERS customer satisfaction rated above targeted levels, and above average customer satisfaction with government programs. Another survey was conducted in 2008, with little change in average scores from 2004. Future surveys of overall customer satisfaction are planned for 2011.

Policy Official Satisfaction Survey

This measure is designed to assess the satisfaction of USDA and other government decision makers with the relevance and usefulness of requested analysis. ERS provides a broad range of research, data, and analysis for public and private decision-makers to use in their analysis of economic issues affecting the food and agricultural sector. Throughout the year, policy officials from USDA agencies or outside of the Department request that ERS provide analysis on specific questions of interest to the requestor. Such questions, referred to as "Staff Analysis," provide policy officials with assessments relevant to their particular questions, and the analyses are typically requested for quick turnaround. This measure assesses requestors' satisfaction with the usefulness of materials provided by ERS in response to their requests for short-term, tailored research, analysis, and data.

Percent of Requested Analysis Delivered on Time

For the "Staff Analysis" described in the previous measure, an indicator of agency performance is the timeliness with which responses are provided to the customer. This measure tracks the timeliness of responses by ERS to requests for short-term tailored research, analysis, and data from government policymakers.

Customer satisfaction with the ERS Web site

In recent years, ERS recast its information dissemination and communications channels to adopt a Web-centric approach to communicating with customers. As a result, 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 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.

Summary of Budget and Performance Full Cost by Agency Strategic Objective

Strategic Objective 1.1: Expand and Maintain International Export Opportunities.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses Pay Costs	11,329	12,168	12,168 293
	Administrative Costs	208	201	201
	Data Acquisition	205	193	193
	Direct Costs (Training, Travel, Supplies)	338	251	351
	Indirect Costs	2,039	1,537	1,691
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 1.1			
	Total Costs (program, direct, and indirect)	14,119	14,350	14,898
	FTEs	97	99	99

Strategic Objective 2.1: Expand Domestic Market Opportunities

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	5,022	5,395	5,395
	Pay Costs			130
	Administrative Costs	92	89	89
	Data Acquisition	159	149	149
	Research Contracts and Agreements	987	1,070	1,070
	Direct Costs (Training, Travel, Supplies)	150	111	156
	Indirect Costs	904	682	750
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 2.1			
	Total Costs (program, direct, and indirect)	7,314	7,497	7,739
	FTEs	43	44	44

$Strategic\ Objective\ 2.2:\ Increase\ the\ Efficiency\ of\ Domestic\ Agricultural\ Production\ and\ Marketing\ Systems.$

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	8,409	9,037	9,037
	Pay Costs			219
	Administrative Costs	155	149	149
	Data Acquisition	510	480	480
	Extramural Program	807	600	200
	Direct Costs (Training, Travel, Supplies)	251	187	261
	Agricultural Resource Management Survey	6,200	8,000	8,000
	Indirect Costs	1,377	1,038	1,142
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 2.2			
	Total Costs (program, direct, and indirect)	17,710	19,489	19,488
	FTEs	72	74	74

Strategic Objective 2.3: Provide Risk Management and Financial Tools to Farmers and Ranchers.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	1,402	1,503	1,503
	Pay Costs			36
	Administrative Costs	26	25	25
	Data Acquisition	795	747	747
	Direct Costs (Training, Travel, Supplies)	42	31	43
	Indirect Costs	268	202	222
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 2.3			
	Total Costs (program, direct, and indirect)	2,532	2,508	2,576
	FTEs	12	12	12

Strategic Objective 3.2: Improve the Quality of Life Through USDA Financing of Quality Housing, Modern Utilities and Needed Community Facilities.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses Pay Costs	4,321	4,644	4,644 112
	Administrative Costs	80	77	77
	Direct Costs (Training, Travel, Supplies)	129	96	134
	Indirect Costs	762	574	632
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 3.2			
	Total Costs (program, direct, and indirect)	5,292	5,390	5,599
	FTEs	37	38	38

$Strategic\ Objective\ 4.1:\ Reduce\ the\ Incidence\ of\ Foodborne\ Illnesses\ Related\ to\ Meat,\ Poultry\ and\ Egg\ Products\ in\ the\ U.S.$

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses Pay Costs	1,168	1,253	1,253 30
	Administrative Costs	21	21	21
	Direct Costs (Training, Travel, Supplies)	35	26	36
	Indirect Costs	186	140	154
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 4.1			
	Total Costs (program, direct, and indirect)	1,410	1,440	1,493
	FTEs	10	10	10

Strategic Objective 4.2: Reduce the Number and Severity of Agricultural Pest and Disease Outbreaks.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	584	626	626
	Pay Costs Administrative Costs	11	10	15 10
	Extramural Program	404	300	100
	Research Contracts and Agreements	822	892	892
	Direct Costs (Training, Travel, Supplies)	17	13	18
	Indirect Costs	103	78	85
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 4.2			
	Total Costs (program, direct, and indirect)	1,941	1,919	1,747
	FTEs	5	5	5

Strategic Objective 5.1: Ensure Access to Nutritious Food.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	2,336	2,514	2,514
	Pay Costs			62
	Administrative Costs	43	41	41
	Direct Costs (Training, Travel, Supplies)	70	52	73
	Indirect Costs	413	311	342
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 5.1			
	Total Costs (program, direct, and indirect)	2,861	2,918	3,033
	FTEs	20	21	21

10-28 Strategic Objective 5.2: Promote Healthier Eating Habits and Lifestyles.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	2,219	2,389	2,389
	Pay Costs			59
	Administrative Costs	41	39	39
	Data Acquisition	5,247	4,931	4,931
	Extramural Program	404	300	100
	Research Contracts and Agreements	219	238	238
	Direct Costs (Training, Travel, Supplies)	66	49	69
	Indirect Costs	390	294	324
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 5.2			
	Total Costs (program, direct, and indirect)	8,587	8,240	8,149
	FTEs	19	20	20

Strategic Objective 5.3: Improve Nutrition Assistance Program Management and Customer Service.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	2,336	2,505	2,505
	Pay Costs			59
	Administrative Costs	43	41	41
	Extramural Program	404	300	100
	Research Contracts and Agreements	4,703	5,100	5,100
	Direct Costs (Training, Travel, Supplies)	70	52	72
	Indirect Costs	392	295	325
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 5.3			
	Total Costs (program, direct, and indirect)	7,947	8,295	8,203
	FTEs	20	20	20

Strategic Objective 6.1: Protect Watershed Health to Ensure Clean and Abundant Water.

3,037		
2.022		
3,03	7 3,266	3,416
56	5 54	83 54
		750 95
		445
Excellent	Excellent	Excellent
ategic Objective 6.1		
		4,843 28
	nts pplies) 99 537 Excellent ategic Objective 6.1 et, and indirect) 3,720	nts

Strategic Objective 6.2: Enhance Soil Quality to Maintain Productive Working Cropland.

PROGRAM	PROGRAM ITEMS	2008 Amount (\$000)	2009 Amount (\$000)	2010 Amount (\$000)
Economic Research and Analysis				
	Salaries and Expenses	2,920	3,140	3,290
	Pay Costs			80
	Administrative costs	54	52	52
	Research Contracts and Agreements			750
	Direct Costs (Training, Travel, Supplies)	87	65	92
	Indirect Costs	537	405	445
	Portfolio Review Score	Excellent	Excellent	Excellent
	Total for Strategic Objective 6.2			
	Total Costs (program, direct, and indirect)	3,598	3,662	4,709
	FTEs	25	26	27
	Total for Economic Research and Analy	vsis		
	Unobligated Balance	,		
	Total Costs (program, direct, and indirect)	77,030	79,500	82,478
	FTEs	386	396	398