

## ECONOMIC RESEARCH SERVICE

### FY 2000 ANNUAL PERFORMANCE REPORT

The Economic Research Service 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). ERS's portfolio was expanded to include international work with the addition of country specialists from the Office of Foreign Agricultural Relations. ERS performs work under one appropriation item--economic analysis and research.

The mission of the Economic Research Service is to inform and enhance public and private decision making on economic and policy issues related to agriculture, food, natural resources, and rural development.

More information on ERS's program is contained in the ERS Strategic plan and the ERS Annual Performance Plans. Only Federal employees were involved in the preparation of this report.

The following table provides summary information on ERS's achievement of FY 2000 Performance Goals. The same two indicators were used for each goal. The first measures the quality of published research, which encompasses research and analysis disseminated to the public, including information on the ERS website, USDA-published monographs, journal articles, periodicals, and other media. The second indicator measures the timeliness of analyses requested by and developed for policymakers, primarily in the Department of Agriculture, the rest of the Executive Branch and the Congress. Most often these are specific questions and have relatively short deadlines.

<b>ERS PERFORMANCE GOAL SUMMARY</b>			
<b>Strategic Goal</b>	<b>FY 2000 Performance Goals</b>	<b>Performance</b>	
		<b>Target</b>	<b>Actual</b>
Goal 1: The agricultural production system is highly competitive in the global economy.	Provide timely and high quality analyses of the economic issues affecting U.S. food and agriculture sector's competitiveness including factors related to performance, structure, risk and uncertainty, marketing, and market and non-market trade barriers. Published research meets peer review standards Requested analyses delivered by deadline	100% 90%	100% 92%
Goal 2: The food production system is safe and secure.	Provide timely and high quality analyses of economic issues affecting the safety of the U.S. food supply including the efficacy, efficiency, and equity of alternative policies and programs designed to protect consumers from unsafe food. Published research meets peer review standards Requested analyses delivered by deadline	100% 90%	100% 88%
Goal 3: The nation's population is healthy and well-nourished.	Provide timely and high quality analyses of economic issues affecting the nutrition and health of the U.S. population including factors related to food choices, consumption patterns at and away from home, food prices, food assistance programs, nutrition education, and food industry structure. Published research meets peer review standards Requested analyses delivered by deadline	100% 90%	100% 93%

ERS PERFORMANCE GOAL SUMMARY			
Strategic Goal	FY 2000 Performance Goals	Performance	
		Target	Actual
Goal 4: Agriculture and the environment are in harmony.	Provide timely and high quality analyses of economic issues affecting agriculture's interface with the environment including those related to integrated pest management, sustainability, biodiversity, global change, and environmental accounting. Published research meets peer review standards Requested analyses delivered by deadline	100% 90%	100% 92%
Goal 5: Enhanced economic opportunity and quality of life for rural Americans.	Provide timely and high quality economic analyses that identify (1) how investments in rural people, businesses, and communities affect rural economies' capacity to survive and prosper in the global marketplace and (2) what policies and programs keep American farms of all sizes viable. Published research meets peer review standards Requested analyses delivered by deadline	100% 90%	100% 93%
Mgmt. Initiative 1 Exert dynamic civil rights leadership in support of an organizational culture based upon the fundamental values of fairness and respect.	ERS efforts contribute to increasing the diversity of the discipline of agricultural economics, ultimately leading to progress in increasing the diversity of the 110 Economist series in ERS. A diverse group of students is recruited and selected for the summer intern program.  ERS employees and managers use a variety of Alternative Dispute Resolution resources to address and resolve workplace disputes. Early intervention and/or mediation are offered to EEO complainants.  Establish and maintain REE EEO Alternative Dispute Resolution Program.  Publicize REE Cooperative Resolution Program.  ERS managers receive conflict resolution training.  ERS staff take advantage of opportunities to increase their skills and contribute to the mission of the agency at a more advanced level. ERS management commits funds for short-and long-term training.  Staff in career enhancement positions progress toward target series and grades.	Yes  Yes  Yes  Yes  Yes  1% of salary funds  8CE positions	Yes  Yes  Yes  Yes  Yes  1.3% of salary funds  9 CE positions

The sections on **2000 Data, Actions and Schedules**, and **Program Evaluations** encompass all five goals and are located after the discussions of results for each individual goal.

**Goal 1:** The agricultural production system is highly competitive in the global economy.

**Objective 1.1:** Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues involved in ensuring that the U.S. food and agriculture sector effectively adapts to changing market structure, domestic policy reforms, and post-GATT and post-NAFTA trade conditions.

### Key Performance Goal

Provide timely and high quality analyses of the economic issues affecting U.S. food and agriculture sector's competitiveness including factors related to performance, structure, risk and uncertainty, marketing, and market and non-market trade barriers.

Percentage of published research that meets peer review standards

**Target:** 100

**Actual:** 100

Percentage of requested analyses delivered by deadline

**Target:** 90

**Actual:** 92

Year	Published Research Meets Peer Review Standards: Actual (Percentage)	Published Research Meets Peer Review Standards: Target (Percentage)	Requested Analyses Meet Deadline: Actual (Percentage)	Requested Analyses Meet Deadline: Target (Percentage)
1998	100%	n/a	87%	n/a
1999	100%	100%	82%	95%
2000	100%	100%	92%	90%

**Analysis of Results:** ERS met this performance goal, both in terms of the performance indicators and in terms of a more substantive review of the agency's program. (Note that the FY2000 Annual Performance Plan indicated 95% under Goal 1 in error; the indicator for timeliness of staff analysis was intended to be consistent (90%) across all five goals for FY 2000 as indicated above). As noted in the section at the end on 2000 Data, the two indicators above provide useful, but limited, information on ERS's success at meeting its objective of enhancing the understanding of policy makers and others of economic issues. As indicated in the ERS Performance Plan, narrative is necessary to provide complementary information on the issues addressed during the year, the relevance of the issues and substance of the work, the means by which the work was disseminated, and the way the work was used. The following are contributions made by the ERS program in FY 2000:

Agriculture and the World Trade Organization Negotiations. During 2000, the ERS research program provided valuable understanding and insight for senior USDA policy staff and the Office of the U.S. Trade Representative (USTR). A major research effort analyzed alternative prospects for further

liberalization in global agricultural markets. ERS led an international research effort that culminated in the release of a global agricultural tariff database. As a result, trade negotiators now understand that tariffs on food and agricultural products constitute the most significant barrier to increased market access for U.S. products. ERS research on the implications of China's accession to the WTO for U.S. agriculture indicated substantial gains for U.S. agricultural exports. Published reports and briefings made this research available to senior staff in USDA and USTR, Congress, and commodity and trade groups.

U.S. Farm Program Benefits. Direct Government payments to the U.S. farm sector topped \$20 billion in FY 2000. ERS analyses in 2000 identified the links between U.S. farm programs and production decisions. Results of the research provided policy makers with a more comprehensive understanding of the program-related economic incentives that may alter production decisions. Crop and revenue insurance play a prominent role in U.S. agricultural policy as part of the farm safety net. ERS research continued to assess farmers' exposure to price and market risk, to evaluate various risk management strategies, and to analyze Government programs addressing risk management. An analysis of differences in yield and revenue risk in explaining farmers' choices of insurance product or coverage levels provided USDA's Risk Management Agency with information useful to its ongoing assessment of insurance product availability and coverage levels.

Developing a Safety Net for Farm Households. Discussions in the public arena have raised fundamental questions about the ultimate goals of farm policy and the need for establishing a safety net for farm households. ERS initiated research to examine different scenarios for Government assistance to agriculture based on the concept of ensuring some minimum standard of living. *A Safety Net for Farm Households* highlights the fact that the farm sector is clearly heterogeneous and a one-size-fits-all approach, as typifies most current programs, is unlikely to address the most significant income problems of U.S. farmers. Findings from this study have been presented to senior policy officials across Government to help inform the debate over directions for future farm policy goals.

Performance of Agricultural Commodity Markets. ERS continued its research on the changing nature of price determination in agricultural commodity markets. A report, *Supply Response Under the 1996 Farm Act and Implications for the U.S. Field Crops Sector*, assessed how changes in commodity farm policy have influenced the way producers respond to changes in market prices. These new relationships provide an enhanced analytic base for the Department's short-term market analysis and long-term outlook projection activities. The pricing relationships have additionally been shared with the Congressional Budget Office staff and are being used in their baseline projection activities.

Food and Agricultural Structure. ERS tracks and explains the structural changes being experienced in the U.S. agricultural and food system, an effort particularly important to understanding the heterogeneity of farms and agribusinesses across the nation, and the implications of these differences for policy design. Limited resources curtail ERS efforts in this area, though the agency recognizes that the rapid changes taking place are of increasing importance to policy makers. In spite of these limits, ERS research has furthered the understanding of USDA decision makers and others about the implications of changing market structure for producers and consumers. In FY 2000, ERS analyzed specific structural changes in various components of the food and agricultural sector.

1. Market Structure. *Vertical Coordination in the Pork and Broiler Industries: Implications for Pork and Chicken Products*, described how new methods of organizing production in the pork and broiler industries led to lower costs, more production, lower retail prices, and more uniform quality. *Understanding the Dynamics of Produce Markets: Consumption and Consolidation Grow*, examined changes in U.S. produce markets and market channels from 1987 to 1997. This was the first in a series of reports examining competitive behavior in the U.S. produce industry. *Consolidation in U.S. Meatpacking* analyzes the causes and effects of dramatic

changes in the meatpacking and chicken and turkey slaughter industries, as plant size has grown and concentration have increased.

2. Farm Structure. In 2000, ERS published in-depth reports on the U.S. dairy and wheat sectors, *Structure, Management, and Performance Characteristics of Specialized Dairy Farm Businesses in the United States* and *Characteristics of U.S. Wheat Farming: A Snapshot*.

Agricultural R&D. *Public-Private Collaboration in Agricultural Research: New Institutional Arrangements and Economic Implications* (Iowa State University Press), based on ERS internal and sponsored research, was published in FY 2000. The book expanded knowledge of the changing structure of the agricultural research system in three important ways. First, it described agricultural research investments in more detail than previously available. Second, it assessed several new institutional innovations that have arisen to strengthen public-private collaboration in research. Third, it explored the international dimension of agricultural technology transfer and the growing global interdependence in agricultural science and technology.

Agricultural Productivity. In FY 2000, ERS published a new data product, *Agricultural Productivity in the U.S.*, now available on the ERS website ([www.ers.usda.gov](http://www.ers.usda.gov)). Further, ERS co-sponsored a workshop entitled "Agricultural Productivity: Data, Methods, and Measures," in collaboration with a North Central regional research committee and the Farm Foundation. The proceedings will be published as a book. In addition, ERS participated in a variety of activities to disseminate its research on measures of agricultural productivity internationally, including an Organization for Economic Cooperation and Development meeting on the Economic Accounts for Agriculture and a Bureau of Labor Statistics International Seminar on Measuring Productivity.

**Current Fiscal Year Performance:** Progress on this goal is continuing in FY 2001. On an ongoing basis, ERS is developing and disseminating research and analysis on the U.S. food and agriculture sector's competitiveness, including continuing work on issues relating to the World Trade Organization (WTO) and Regional Trade agreements; domestic policy reforms; the structure and performance of agricultural commodity markets; the economic and financial structure, performance and viability of the farm sector and different types of farms; the state of global food security; technological innovation; and crop insurance reform and other forms of risk management. ERS also is monitoring the food marketing system, identifying the new trends in a variety of product introductions and price distributions, and assessing the efficiency of the food supply chain.

**Goal 2:** The food production system is safe and secure.

**Objective 2.1:** Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues involved in improving the efficiency, efficacy, and equity of public policies and programs designed to protect consumers from unsafe food.

### Key Performance Goal

Provide timely and high quality analyses of economic issues affecting the safety of the U.S. food supply including the efficacy, efficiency, and equity of alternative policies and programs designed to protect consumers from unsafe food.

Percentage of published research that meets peer review standards

**Target:** 100

**Actual:** 100

Percentage of requested analyses delivered by deadline

**Target:** 90

**Actual:** 88

Year	Published Research Meets Peer Review Standards: Actual (Percentage)	Published Research Meets Peer Review Standards: Target (Percentage)	Requested Analyses Meet Deadline: Actual (Percentage)	Requested Analyses Meet Deadline: Target (Percentage)
1998	100%	n/a	93%	n/a
1999	100%	100%	87%	95%
2000	100%	100%	88%	90%

**Analysis of Results:** ERS met the overall requirements of this goal and met the target for the first indicator, but barely missed its goal on timeliness of staff analysis. This reflected a failure to meet two deadlines, one by 2 days and the other by 3 days. The two missed deadlines were not significant in terms of achieving the overall objective. As indicated in the ERS Performance Plan, narrative is necessary to provide complementary information on the issues addressed during the year, the relevance of the issues and substance of the work, the means by which the work was disseminated, and the way the work was used. The following are contributions made by the ERS program in FY 2000:

Assigning Values to Life: Comparing Methods for Valuing Health Risks. ERS researchers examined five approaches economists and health policy analysts have developed for evaluating policy affecting health and safety: cost-of-illness, willingness-to-pay, cost-effectiveness analysis, risk-risk analysis, and health-health analysis. They found distinct differences among the approaches in terms of their appropriateness in analyzing different kinds of issues. Using those differences as a basis, a research report, *Assigning Values to Life: Comparing Methods for Evaluating Health Risks*, suggests the appropriate use for each approach. The research is used by regulatory agencies, such as the Food Safety and Inspection Service, in their cost/benefit analysis of proposed regulatory actions.

Costs and Benefits of Improvements in Food Safety. The level and distribution of the costs and benefits of the Food Safety and Inspection Service's (FSIS) Hazard Analysis and Critical Control Point (HACCP) regulatory program for meat and poultry change dramatically when economy-wide effects are included in the analysis. *Tracing the Costs and Benefits of Improvements in Food Safety: The Case of HACCP for Meat and Poultry* provided policymakers with information about who ultimately benefits from reduced foodborne illnesses and who ultimately pays the costs of food safety regulation. This analysis also explored a number of issues central to congressionally-mandated cost/benefit analysis involving health, highlighting the danger of equating changes in income with changes in well-being. FSIS used the research to determine who would gain and who would lose as a result of their regulatory program.

Consumer Acceptance of Irradiated Meat and Poultry Products. The Federal Government began allowing food manufacturers to irradiate raw meat and meat products to control pathogenic microorganisms in February 2000. However, food manufacturers have been slow to adopt irradiation, partly because of the perception that relatively few consumers are willing to buy irradiated foods. *Consumer Acceptance of Irradiated Meat and Poultry* reported on a recent survey by the Foodborne Diseases Active Surveillance Network that confirmed this perception. The findings suggest that the impact of food irradiation on public health will be limited unless consumer preferences change, perhaps in response to educational messages about the safety and benefits of food irradiation. The Food Safety and Inspection Service, in its efforts to ensure the availability of safe meat, is using this research to help assess the pros and cons of irradiation as a tool in achieving its goals.

**Current Fiscal Year Performance:** ERS expects to meet this goal again in FY 2001. ERS continues to study the costs of foodborne illnesses and the benefits of improving food safety. ERS is also actively collaborating with partner agencies in the National Food Safety Initiative. ERS researchers are studying ways to rank food safety risks on the basis of economic costs to assist the Risk Assessment Consortium

in its efforts to prioritize food safety risks. Agency staff are also participating in the Antimicrobial Resistance Working Group, the Joint Institute for Food Safety Research, the Animal Production Food Safety Committee, the Risk Assessment Consortium Policy Committee, and the Interagency Working Group on Produce Food Safety Issues.

ERS received increased funding for work under Goal 2 in FY 1999 and FY 2000. Using this funding, ERS administered a competitive process through which several grants were awarded. The projects, currently underway, will apply state-of-the-art valuation methodologies to measure consumers' willingness to pay for reductions in food safety risks from microbial pathogens in foods.

**Goal 3:** The nation's population is healthy and well-nourished.

**Objective 3.1:** Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of the factors affecting food prices and of the efficiency and effectiveness of alternative public policies and programs aimed at ensuring consumers equitable access to wide varieties of high quality food at affordable prices.

### Key Performance Goal

Provide timely and high quality analyses of economic issues affecting the nutrition and health of the U.S. population including factors related to food choices, consumption patterns at and away from home, food prices, food assistance programs, nutrition education, and food industry structure.

Percentage of published research that meets peer review standards

**Target:** 100

**Actual:** 100

Percentage of requested analyses delivered by deadline

**Target:** 90

**Actual:** 93

Year	Published Research Meets Peer Review Standards: Actual (Percentage)	Published Research Meets Peer Review Standards: Target (Percentage)	Requested Analyses Meet Deadline: Actual (Percentage)	Requested Analyses Meet Deadline: Target (Percentage)
1998	100%	n/a	69%	n/a
1999	100%	100%	100%	95%
2000	100%	100%	93%	90%

**Analysis of Results:** ERS met this performance goal. In addition to the above indicators, the following narrative provides complementary information on the issues addressed during the year, the relevance of the issues and substance of the work, the means by which the work was disseminated, and the way the work was used:

Benefits of Nutrition Labeling on Fresh Meat and Poultry Products. The Food Safety and Inspection Service (FSIS) has proposed requiring that nutrition information be provided for fresh meat and poultry products. ERS estimated that changes in consumer behavior in response to the nutrition information could lead to more healthful food choices, thereby reducing medical costs, productivity losses, and premature death from diet-related diseases, with benefits of as much as \$145 million per year. This

research was provided to FSIS for inclusion in the *Federal Register* notice of the proposed rule.

The Decline in Food Stamp Program Participation in the 1990s. *The Decline in Food Stamp Program Participation in the 1990s*, which detailed ERS findings on the unprecedented decline in participation in the Food Stamp Program (FSP) from 27.5 million participants in 1994 to 18.2 million participants in 1999, was widely circulated and featured on the Food and Nutrition Service website. Similar findings from ERS-sponsored research were also presented in a panel organized by ERS at the Association for Public Policy and Management annual meetings. ERS also helped support a major literature review conducted by Mathematica Policy Research, Inc. to understand welfare reform's impact on FSP and Medicaid participation. In addition, ERS is collaborating with the U.S. Department of Health and Human Services and the Robert Wood Johnson Foundation in a \$6.8 million initiative to support technical assistance activities designed to help public officials diagnose and solve problems in Medicaid, the State Children's Health Insurance Program, and Food Stamp eligibility systems in up to 22 states or large counties.

Behavioral Nutrition and Obesity. The increasing prevalence of obesity in the U.S. has led to interest in better understanding the complex sets of behaviors that lead to obesity. ERS convened a roundtable that brought together experts from different fields (such as economics, social psychology, and medicine) to discuss approaches to understanding obesity-promoting consumer behavior. Because obesity is more prevalent among low-income populations, the Food Assistance and Nutrition Research Program (FANRP) established behavioral nutrition as a research priority in its competitive grants and cooperative agreement program. The roundtable and the FANRP research are providing information that assists USDA agencies and others in developing more effective nutrition education programs.

Food Stamp Program Employment and Training Program. In response to a congressional mandate in the Balanced Budget Act (BBA) of 1997, ERS published *Report to Congress on State Use of Funds to Increase Work Slots for Food Stamp Recipients*, which examined the response of States to a major increase in funding provided to them for the Food Stamp Employment and Training (E&T) Program. The E&T Program is aimed at creating work opportunities for able-bodied adults without dependents and was expanded as part of welfare reform. This completed report had four principal findings: the majority of States have changed the focus of their E&T program services to target able-bodied adults without dependents; total E&T program expenditures have increased, though States utilized less of their Federal grant allocations and more of State matching funds; participation in the E&T program dropped sharply after BBA, with variations among States and among E&T component types; and States reported many challenges in serving the targeted population and made specific recommendations for improving the program.

Nutrient Intake of Children. Although children aged 1 to 4 years old comprise about half of all participants in the Food and Nutrition Service (FNS) Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), few studies have examined the impact of the program on children. An ERS study, *WIC and the Nutrient Intake of Children*, helped fill this gap, finding that participation in the WIC program had a significant positive effect on children's intake of several nutrients, including iron. The finding regarding iron was especially useful, since low intake of iron, which may lead to anemia, is considered to be an important public health issue. FNS used the report as part of their regular program evaluation.

Food Security in U.S. Households. In 2000, ERS funded the sixth annual National Food Security Survey, conducted by the Census Bureau as a supplement to the Current Population Survey. The survey is designed to measure whether households always have access to enough food to meet basic needs. ERS also released *Household Food Insecurity in the United States, 1999*, a report on the prevalence of household food insecurity and hunger in the United States based on the previous year's food security survey. ERS collaborated with the Census Bureau to prepare and release public-use data files of the food security surveys for 1996, 1997, and 1998. In addition, ERS facilitated collection of critical data for studying effects of food assistance programs by supporting use of the food security survey module on

several national and State surveys. ERS work on food security supports the Food and Nutrition Service in assessing its programs and, more generally, in assessing its success in achieving its objective of increasing food security in the United States.

**Current Fiscal Year Performance:** ERS expects successful performance on this goal to continue in FY 2001. Through the Food Assistance and Nutrition Research Program (FANRP), ERS is conducting studies and evaluations of the Nation’s food assistance programs. FANRP research is designed to meet the critical information needs of USDA, Congress, program managers, policy officials, USDA program clients, the research community, and the public at large. FANRP research is conducted through internal research at ERS and through a portfolio of external research. Through partnerships with other agencies and organizations, FANRP is enhancing national surveys by adding a food assistance dimension. FANRP’s long-term research themes are dietary and nutritional outcomes, food program targeting and delivery, and program dynamics and administration.

ERS is studying the relationships between and among the many factors that influence consumer decisions about food consumption. ERS researchers are developing an applied economic model of consumer behavior to explain how the choices available to consumers and the constraints placed upon them affect dietary choices. ERS also is monitoring food insecurity and hunger in U.S. households and conducting research to refine and improve methods for measuring these conditions.

**Goal 4:** Agriculture and the environment are in harmony.

**Objective 4.1:** Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of the economic issues involved in balancing long term sustainability goals with improved agricultural competitiveness and economic growth and of the effects of Federal farm, natural resource, and rural policies and programs on that balance.

**Key Performance Goal**

<u>Provide analyses of economic issues affecting agriculture’s interface with the environment including those related to integrated pest management, sustainability, biodiversity, global change, and environmental accounting.</u>	
Percentage of published research that meets peer review standards	
<b>Target:</b>	100
<b>Actual:</b>	100
Percentage of requested analyses delivered by deadline	
<b>Target:</b>	90
<b>Actual:</b>	92

Year	Published Research Meets Peer Review Standards: Actual (Percentage)	Published Research Meets Peer Review Standards: Target (Percentage)	Requested Analyses Meet Deadline: Actual (Percentage)	Requested Analyses Meet Deadline: Target (Percentage)
1998	100%	n/a	88%	n/a
1999	100%	100%	85%	95%
2000	100%	100%	92%	90%

**Analysis of Results:** ERS met this performance goal. In addition to the above indicators, the following narrative provides complementary information on the issues addressed during the year, the relevance of the issues and substance of the work, the means by which the work was disseminated, and the way the work was used:

Agricultural Resources and Environmental Indicators. ERS published on the web the 2000 update of its popular monograph *Agricultural Resources and Environmental Indicators*. This report identified trends in land, water, and biological resources and commercial input use; reported on the condition of natural resources used in the agricultural sector; and described and assessed public policies that affect conservation and environmental quality in agriculture. Combining data and information, this report examined the complex connections between and among farming practices, conservation, and the environment, which are increasingly important components in U.S. agriculture and farm policy.

Adopting Genetically Engineered Crops. In 2000, *Genetically Engineered Crops for Pest Management in U.S. Agriculture* reported that adoption of genetically engineered (GE) crops with traits for pest management has risen dramatically since their commercial introduction in the mid-1990s. ERS staff presented estimates of the impacts of adopting GE crops on pesticide use at the Sixth International Symposium on the Biosafety of Genetically Modified Organisms in Canada. Further, ERS participated in a National Academy of Science workshop, *Ecological Monitoring of Genetically Modified Crops*, discussing methods for monitoring changing farm practices related to GE crops. The workshop was part of a series of studies of the U.S. regulatory framework for GE crops initiated by USDA in response to concerns about the safety and environmental impact of the technology. These activities support the cross-cutting initiative on *Agricultural Biotechnology*.

Conservation Programs and Policy. In FY 2000, ERS was a member of an inter-agency USDA working group responsible for assessing producer offers to bid land into the Conservation Reserve Program (CRP). ERS analyzed incentives for producers to enroll land in the continuous signup, and was part of the team that reviewed all State Conservation Reserve Enhancement Program (CREP) proposals and recommended changes in incentive structures proposed. These analyses helped USDA improve the environmental performance of the CRP and related programs, while lowering their cost to U.S. taxpayers. ERS researchers were part of the interagency CREP Team awarded a National Partnership for Reinventing Government "Hammer" award in FY 2000. In addition, ERS economists briefed USDA officials on their analysis of the proposal for a Conservation Security Program, and participated in a number of forums convened by stakeholders in conservation policy.

Water Quality. ERS published its study, *Economics of Water Quality Protection from Nonpoint Sources: Theory and Practice*, examining how different policy instruments (economic incentives, standards, liability, education, and research) perform in providing pollution control at least cost, and what kinds of information are needed to improve the performance of nonpoint source pollution control policies. Users of this research include agricultural and environmental policymakers, and producers and the organizations that represent them.

Waste Management Issues. ERS worked with the Natural Resources Conservation Service and the National Agricultural Statistics Service to jointly develop USDA estimates of the number of farms that may need assistance with comprehensive nutrient management plans that include manure, and the number of animals on farms that may come under new EPA regulations. ERS interacted with Environmental Protection Agency economists responsible for estimating costs and benefits of the proposed rule changes for Concentrated Animal Feeding Operations under the USDA/EPA Unified National Strategy for Animal Feeding Operations. ERS is participating on a USDA inter-agency technical working group to conduct a Cost and Capability Assessment for implementation of the comprehensive nutrient management plans (CNMP) called for in the USDA/EPA Unified National Strategy. In an article in *Agricultural Outlook*, ERS summarized its current research findings regarding the extent to which confined animal feeding operations may pose manure management problems. These efforts support

integrated assessments in the cross-cutting initiative on *Integrated Science for Ecosystem Challenges*.

U.S. Trade and Environment Initiatives. ERS and the Farm Foundation co-sponsored a workshop on the effect of environmental regulation on location decisions by firms in the food and agricultural sectors. The workshop examined measurement issues pertaining to inter-jurisdictional variation in environmental regulations, the degree to which these regulations are enforced, alternative modeling frameworks that can be used to measure location response, and data needs for testing the hypothesis that countries might be competing for agricultural businesses by curtailing environmental regulations.

Analysis of Inputs for Crop Production. In support of USDA and EPA implementation of the Montreal Protocol and the U.S. Clean Air Act, ERS coordinated analyses of the economic impacts of using alternatives to methyl bromide as use of that pesticide is phased out, and published a report, *Economic Implications of the Methyl Bromide Phaseout*. ERS supported the development of transition strategies for pesticide registration changes under the Food Quality Protection Act with ERS funds allocated to support pest research and control programs under the cross-cutting initiative on *Food Quality Protection Act and Integrated Pest Management and Related Programs*

Adoption of Organic Agriculture. On its new website ([www.ers.usda.gov](http://www.ers.usda.gov)), ERS published the first set of estimates of crop acreage under certified organic farming systems in the U.S., *U.S. Organic Agriculture—Statistical Tables, 1992-97* and summarized the findings in an article in *Agricultural Outlook*.

**Current Fiscal Year Performance:** ERS expects continued success in achieving this goal during FY 2001. ERS is continuing to conduct research on economic and environmental issues associated with emerging biotechnology adoption, global climate change and agriculture, agricultural water quality and waste management, conservation and environmental programs, management of crop inputs, and interactions between trade and the environment. In addition, the Agency is collecting, analyzing, and reporting on trends in resource conditions and use, technology adoption, and productivity. ERS research and analysis in these areas supports numerous USDA programs. ERS also is examining the lessons from past conservation policies for the design of new conservation strategies for the new Farm Bill, and will be completing a monograph on the subject in the near future. ERS is part of a multi-institution team developing analyses for the next Farm Bill, involving Purdue, University of Tennessee and other USDA economists.

**Goal 5:** Enhanced economic opportunity and quality of life for rural Americans.

**Objective 5.1:** Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of economic issues affecting rural development and performance of all sizes of American farms.

**Key Performance Goal**

Provide timely and high quality economic analyses that identify (1) how investments in rural people, businesses, and communities affect rural economies' capacity to survive and prosper in the global marketplace and (2) what policies and programs keep American farms of all sizes viable.

Percentage of published research that meets peer review standards

**Target:** 100

**Actual:** 100

Percentage of requested analyses delivered by deadline

**Target:** 90

**Actual:** 93

Year	Published Research Meets Peer Review Standards: Actual (Percentage)	Published Research Meets Peer Review Standards: Target (Percentage)	Requested Analyses Meet Deadline: Actual (Percentage)	Requested Analyses Meet Deadline: Target (Percentage)
1998	100%	n/a	81%	n/a
1999	100%	100%	88%	95%
2000	100%	100%	93%	90%

**Analysis of Results:** ERS met this performance goal. In addition to the above indicators, the following narrative provides complementary information on the issues addressed during the year, the relevance of the issues and substance of the work, the means by which the work was disseminated, and the way the work was used:

Successful Small Farms. During FY 2000, ERS made substantial contributions to the policy discussion regarding small farms and other structural issues, summarizing its findings on what makes a small farm successful in an article in *Agricultural Outlook*. ERS has presented its findings in a variety of forums, including the National Black Farmers Association Conference, Agricultural Research Service National Outreach Workshop, the American Agricultural Economics Association Meetings, and the National Public Policy Education Conference.

Rural Dimensions of Welfare Reform. In May of 2000, ERS, the Joint Center for Poverty Research (JCPR), and the Rural Policy Research Institute (RUPRI) organized a research conference on the effects of welfare reform on rural people and places. The conference offered the first comprehensive comparison of rural and urban impacts of welfare reform. In June, findings from the conference were presented at a research briefing for congressional staff, sponsored by RUPRI and JCPR, and funded by the Farm Foundation. W.E. Upjohn Institute will publish the conference findings in 2001.

Rural Low-Wage Workers. The December 2000 issue of *Rural Conditions and Trends*, with a special emphasis on changing supply and demand of low-wage workers, reported that, although recent favorable economic performance benefitted many rural people, it did not benefit all rural people and areas equally. Recent rural development policy initiatives, such as the New Markets Program, are intended to jumpstart growth in many of the distressed rural areas. At the same time, rural areas face new challenges as welfare reform gradually moves a new set of workers into the low-wage labor force. This multi-faceted study provided a better understanding of the economic and social context in which these new policies will operate, identified the people and places most in need of assistance, and highlighted both the possibilities and limitations of Federal efforts to improve economic well-being for rural residents.

Housing for Rural Minorities. ERS has conducted a series of studies to help identify factors related to housing availability, affordability, and adequacy for rural minorities and to assess the use and effectiveness of Federal housing assistance programs in rural areas to help these target groups. Study findings were reported in *Meeting the Housing Needs of Rural Residents* and several issues of *Rural America*. At the request of USDA's Rural Housing Service (RHS), ERS collected national survey data on the USDA Single Family Direct Loan Housing Program. Study results were provided to RHS to help assess the use and effectiveness of their program for reaching targeted populations in need.

Agriculture's Role in the Rural Economy. The Rural Industry issue of *Rural Conditions and Trends* reported on how nonfarm growth and structural change are altering agriculture's role in the rural economy. A follow-up article in *Agricultural Outlook* concluded that Government farm payments play a minor role in the rural economy—a role outweighed by the Federal Government's payments for income

security and health care. This research was widely reported in the farm media, and is the main source of information on this topic. This information is being used by policymakers, farm groups, and bankers. Another report, *Tobacco and the Economy: Farms, Jobs and Communities*, provided a wealth of information on how a specific commodity and its forward-linked industries affect the rural economy. The President's Commission on Tobacco-Dependent Communities relied heavily on this report in preparing its own report.

Effects of Federal Tax Policy on Agriculture. ERS completed a review of the effects of Federal tax policies on agriculture, including the effects of various tax proposals to aid beginning farmers. The study, conducted in response to a recommendation of the National Commission on Small Farms, adapted the farm typology developed by ERS to differentiate impacts on several types of small farms using Internal Revenue Service tax data. A separate series of reports, starting with *Regionalism, Federalism, and Taxation: A Food and Farm Perspective*, focused on the differential impacts of State and Federal taxes on various segments of the food and fiber system.

Agricultural Credit When Farm Commodity Prices Are Low. The annual "Lenders Issue" of *Agricultural Income and Finance* documented the strong position of agricultural lenders going into 2000 and described their cautious approach to agricultural lending. But it also pointed out that lenders were confident about the repayment capacity of the vast majority of their farm borrowers. A series of articles and papers examined the role USDA's credit programs play in assisting less creditworthy borrowers, particularly small, beginning, and disadvantaged farmers. This research highlighted the importance of commercial banks and other lenders in delivering USDA's credit assistance and was widely cited during Congressional hearings on Federal regulation of the Farm Credit System.

Federal Spending in Rural America. Using data from the Bureau of the Census, ERS analyzed the geographic distribution of Federal spending, with an emphasis on programs important for rural development. The January 2000 issue of *Rural America* analyzed Federal spending in the Black Belt, a high-poverty region in the South with high percentages of Black residents. An additional analysis focused on Federal spending in the South. The May 2000 issue of *Rural Conditions and Trends* highlighted changes in Federal programs of importance to rural America. This project supplied information to various policymaking institutions, including the Organization for Economic Cooperation and Development, the General Accounting Office for its study of Rural Housing (September 2000), and the Rural Development mission area.

The Digital Divide. With the increasing importance of the Internet and advanced telecommunications services for conducting public, private, and personal business, concern is growing over access to these services. *Telecommunications in Rural Economic Development* reported on the proceedings of an ERS-sponsored workshop that explored rural access to advanced telecommunications facilities and the importance of these facilities for rural development. The October 1999 issue of *Rural Development Perspectives* examined strategic planning for rural telecommunications, telemedicine in rural communities, and access to telecommunications by those with disabilities. A series of conference papers explored differences in telecommunications policies in the U.S. and Europe, highlighting racial and urban-rural disparities in Internet use. ERS efforts to assess the impacts of the Digital Divide are used by USDA's Rural Utilities Service in carrying out their responsibilities for providing financing for affordable telecommunications and telemedicine services in rural America.

**Current Fiscal Year Performance:** Progress on achieving Goal 5 is continuing in FY 2001. ERS is monitoring changing economic and demographic trends in rural America, with particular attention to the implications of these changes for the employment, education, income, and housing patterns of low-income rural populations. An ERS study currently underway will identify and analyze factors affecting growth in remote rural areas. This study is part of a multi-county international project conducted under the auspices of the Organization for Economic Development and Cooperation. Other studies will investigate the effects of various policy scenarios, including increases in the minimum wage and the Earned Income Tax Credit, on the poverty and employment status of rural welfare recipients.

The Agency is conducting research on the effectiveness of Federal programs aimed at aiding rural residents, farm operators, and rural communities. Researchers are also examining Federal credit and tax policies to assess their impact on the intergenerational transfer of farm assets. Also, researchers are assessing the impact of structural and policy changes on the cost and availability of electric, telecommunications, and financial service in rural America.

**2000 Data:** The FY 2000 data are final for all the indicators under each goal.

The first indicator is aimed at assessing the quality of ERS research and analysis, using review by others with expertise in the appropriate disciplinary or issue area as a standard. It indicates whether or not the agency met its goal of only releasing publications after they have met the standards of peer review. There is a continuum of review requirements, from the most limited review, which requires three peer reviewers, one of whom must be external to the author's branch, to the most extensive review, in which there are three or more reviewers, at least two of whom are external to ERS. The peer review process is managed, monitored, and tracked by Product Coordinators in each of ERS's three program divisions. As a result, the data on quality, as measured by peer review, are sound and dependable.

The second indicator reflects ERS timeliness in responding to requests from decision makers for specific analyses of issues or problems. Most of these deadlines are internally set. The standard used for measurement was that the analysis was provided to the customer within one day of the original deadline. The timeliness data are also dependable. The ERS Staff Analysis Coordinator maintains records of all external requests for ERS analysis, including information on the date received, the deadline set by the agency, and the date actually completed.

The two indicators used throughout this report, while providing useful insight into the timeliness and quality of ERS's work, do not adequately capture evidence of the Agency's success in achieving its overarching objective of enhancing understanding by policymakers and others of the economic issues involved in each goal. To fill the gap, narratives outlining ERS contributions to meeting the needs of decisionmakers on the issue areas underlying each goal are included in this report.

**Description of Actions and Schedules:** In FY 2001, ERS will continue to work toward improving its indicators for assessing success in achieving its mission and meeting its goals. As a social science research agency, it faces challenges in evaluating its impacts on actual outcomes. Although economic research and information may be considered by decision makers, their final decisions may not be based solely on economic information. It is ERS's role—as reflected in the language of its goals and objectives—to ensure that it produces accurate, thorough information on the issues of importance to its customers when they need it and in a form and format they can use.

As part of its efforts to better evaluate success in achieving its goals, in FY 2000, ERS developed and implemented the Program Information Management System (PIMS). PIMS is a web-based system for searching, managing and relaying up-to-date information about the content and status of ERS research and analysis, products and services, and professional activities. PIMS will increase ERS's capacity to compile and communicate agency-wide information—for example, the contributions to achieving a particular goal or assisting a particular program agency of the Department of Agriculture. The system will also allow managers and researchers to access information to better plan the ERS program and portfolio of products and services; more effectively convey these products and services to key customers; and more systematically evaluate and track output by REE goal, customer, topic, division, branch, and individual. While PIMS is now operational, continuing improvement will make it an increasingly useful tool over time. PIMS will interface with the Current Research Information System (CRIS), aiding in streamlining and improving the quality of ERS CRIS reporting. These improvements, in turn, will enhance the quality of reporting possible from the USDA Research, Education, and Economics Information System (REEIS) currently under development

**Program Evaluations:**

In FY 1999, the National Research Council of the National Academy of Science completed a major review of the ERS program. In FY 2000, ERS did not conduct performance evaluations of that breadth and depth, but undertook a more narrowly focused review of part of its program, with an aim of exploring better means of understanding of how customers view the ERS program and of the customers' needs:

Commodity Roundtables. ERS established quarterly meetings with commodity groups and over the course of the year expanded them to include a wider spectrum of customers to provide feedback on the ERS market analysis and outlook program. Issues covered included the influence of biotechnology on the marketing and trade of agricultural products, prospects for further trade reform under the World Trade Organization and implications for U.S. agriculture, and the implications of changing structure and performance in selected food and agricultural markets. Participants indicated that the Roundtables have given them a clearer understanding of the breadth of the ERS research analysis relevant to current and emerging commodity issues. In addition, Roundtable participants served as "sounding boards" for the new ERS web-based outlook information access and dissemination system. During the development phase over the course of the year, they provided feedback and advice that was heeded as final decisions were made on content and presentation. The Commodity Roundtables will provide an ongoing forum for review and discussion of the ERS market analysis and outlook program.

**Management Initiatives:**

In general, ERS administrative support is performed with ERS resources by the REE mission area's Administrative and Financial Management (AFM) staff in the Agricultural Research Service. ERS cooperates with the AFM staff to ensure that USDA financial management requirements relating to internal control, cost accounting, and audited financial statements are completed. ERS does not have any GAO/OIG-identified management challenges or high risk areas. ERS does have responsibility for its own non-administrative management issues, including civil rights.

**Management Initiative 1:** Exert dynamic civil rights leadership in support of an organizational culture based upon the fundamental values of fairness and respect.

## Performance Goals

ERS efforts contribute to increasing the diversity of the discipline of agricultural economics, ultimately leading to progress in increasing the diversity of the 110 Economist series in ERS.

A diverse group of students is recruited and selected for the summer intern program.

**Target:** Yes

**Actual:** Yes

Composition of summer intern group

African American: 37.5% Asian: 12.5% Hispanic: 4.2% White: 45.8%

Female: 54% Male: 46%

ERS employees and managers use a variety of Alternative Dispute Resolution resources to address and resolve workplace disputes.

Early intervention and/or mediation are offered to EEO complainants.

**Target:** Yes

**Actual:** Yes

Establish and maintain REE EEO alternative dispute resolution program.

**Target:** Yes

**Actual:** Yes

Publicize REE Cooperative Resolution Program.

**Target:** Yes

**Actual:** Yes

ERS managers receive conflict resolution training.

**Target:** Yes

**Actual:** Yes

ERS staff take advantage of opportunities to increase their skills and contribute to the mission of the agency and a more advanced level.

ERS management commits funds for short- and long-term training

**Target:** 1% of salary funds

**Actual:** 1.3% of salary funds

Staff in career enhancement positions progress toward target series and grades.

**Target:** 8 career enhancement positions

**Actual:** 9 individuals have reached or are progressing toward targeted position and grade

**Analysis of Results:** ERS met its goals as measured in each of the indicators. Achieving the first goal is the most complex. Because of the traditionally homogenous demographics of the agricultural economics discipline, ERS has adopted a long-range strategy of increasing the diversity of the main component of its workforce, those in the economist series. ERS's aim is to increase the size of the pool of minorities who have the kinds of qualifications needed for ERS economic research positions--Ph.D.'s or equivalent research experience. National Research Council data for 1999 show that only six African Americans, six Asians, no American Indians, and one Hispanic American received Ph.D.'s in agricultural economics that year. Given these statistics, traditional approaches to hiring are not very effective. ERS's approach has been to try to increase the number of minority students majoring and going to graduate school in agricultural economics and economics. Increasingly, the agency is maintaining long-term relationships with minority students who start as summer interns and are working toward Ph.D.'s.

**FY 2000 Data:** The data are final for each performance goal under the Management Initiative.

**Additional Management Initiative in FY 2000:** Although not outlined in the FY 2000 performance plan, ERS did undertake an additional major management initiative in FY 2000. The Administrator formed a Management Advisory Committee, composed of the agency's senior management, to assess and re-tool ERS capability for producing and disseminating research output. The ultimate goal was transformation

of the ways ERS serves its customers, moving from the traditional focus on hard copy publications as a dissemination tool to electronic output that could be disseminated through different media and formats. The outcomes of this effort, composed of four central projects, are, as planned, resulting in a sharply different approach to the agency's communication and dissemination responsibilities, including:

- Recognition of the high priority—equal to the priority for developing high quality social science information and research—ERS must place on its responsibility for effective dissemination of its work;
- Development of a new website that establishes ERS as a premier provider of real-time, real-value economic analysis to its primary customers via the World Wide Web;
- Initiation and significant progress on an integrated information system that will capture agency output and ERS contributions to the decision making process;
- Initiation of a customer management system to support targeted and timely dissemination of ERS information to customers and to assess the agency's effectiveness in meeting that goal.