

1862 University Outreach and Extension – University of Missouri System

Overview

Missouri's economic base and its population are diverse. Nearly 60 percent of the population resides in the two metropolitan areas of St. Louis and Kansas City. On the other hand, 48 counties have less than 15,000 people. The total population in 1998 is estimated at 5.4 million. Twenty-nine counties lost population between 1990 and 1998; twenty-three of them in north Missouri. At the same time, many counties in the southern part of the state have had significant population growth, primarily due to in-migration of retirees. The recreation areas in the state, especially the Lake of the Ozarks and the Branson area, have experienced significant population growth during the past decade. There is also great diversity among individuals and families in the state.

The economic base of Missouri is also diverse. Tourism, industry and agriculture are the major sectors in the economic base. By Census count there are 98,860 farms in Missouri. For the first time in decades the number actually "increased" between the most recent Agricultural Census periods. The number of farms with sales of more than \$100,000 is slightly more than 10,500 whereas the number with less than \$50,000 of sales totals 81,600. The circumstances among small farms vary widely from those trying to make a significant portion of their living from the farming operation to those who are farming on a small scale as a "way of life" By all measures, Missouri is a state of small farms.

Detail regarding the situation is provided in the "issues statement" included with each major program effort included in the plan of work.

The identification of priority issues and concerns -- using the stakeholder process described below -- led to the following priorities for FY00-04:

Summary Table: County Program Plan Priorities

Base Program/Program Clusters	Number of Times Programs Appear in County Plans
I. Agriculture Profitability and Viability	
Business and Farm Management	168
Crop Production Systems	104
Horticulture	55
Profitable Livestock Production Systems	83
Sustainable Agriculture	70
Dairy	13
Small Farms	8
Agriculture/Farm Safety	1
	502
II. Environmental Quality & Stewardship	
Water Quality	67
Natural Resource Management	83
Waste Management	62

Air Quality	4
	216
III. Family Strengths	
Parent Education	101
Child Care	54
Family Financial Management	97
Building Strong Families	47
Elderly	36
Housing	30
Poverty at Issue	3
	372
IV. Nutrition and Health	
Decisions for Health	153
Comprehensive School Health and Nutrition	2
	155
V. 4-H Youth Development	274
VI. Business, Community and Economic Development	
Workforce Preparedness	41
Citizen Education and Leadership	81
Community Based Development	88
Small Business Development	113
Information Technology	24
Education	15
	362

Stakeholder Input

University Outreach and Extension, University of Missouri System (in cooperation with Lincoln University), define the following as stakeholders:

- The 1,988 Missouri citizens who are elected and appointed to serve on the 114 County Extension Councils under Chapter 262.550-262.620 of the Revised Statutes of Missouri.
- The Regional Extension Councils that represent the 114 county extension councils in our eight administrative regions of the state.
- The 11 citizens who serve on the self-organized and self-governed Missouri Extension County Council Leadership Council who advise and work for the betterment of University Outreach and Extension on a continuing basis.
- The more than 7,000 citizens who participated in the program development process.
- The regional extension specialists and campus based faculty and administrators who are involved with University Outreach and Extension.

The process for gaining stakeholder input into the plan of work task involved the following steps:

- Involvement of more than 7,000 citizens in 275 separate sessions in all 114 counties to identify the priority issues and concerns of Missouri citizens. A “deliberative group process” was used. Each session lasted from 2 ½ to 3 hours. The process was

structured to get input from every participant and ended up with a summary of the 5-8 issues and concerns of highest priority. See county summaries at:

<http://outreach.missouri.edu/about/fy00-03>. County Extension Councils and staff were provided with a template to assist in recruiting participants. Data were collected on those who participated. Diversity representing the diversity in the county was achieved in most cases. Nearly 10 percent of the participants were youth under 18; the gender split was nearly even; about 10 percent were minorities; and 40 percent had had little or no previous involvement with Extension prior to the deliberative group sessions.

- The County Extension Councils, under Missouri law, have a responsibility to review and provide counsel to the university regarding programs. The County Extension Councils reviewed the outcome of the deliberative group sessions (noted above), studied the social and economic trend data for the county, reviewed the current extension educational programming in the county to determine whether existing programs should be continued, revised, or eliminated. Based on this information, and their own knowledge and expertise, the Council in each county worked with the staff to prepare a draft County Program Plan which included the program priorities to be addressed over the next four years.
- The draft plan was circulated to all that had participated in the deliberative group sessions and other stakeholders in the county for comment.
- The Council reviewed the input, revised as they deemed appropriate and submitted their final County Program Plan by June 1, 1999. The County Program Plans may be accessed at: <http://outreach.missouri.edu/about/fy00-03>.
- The Program Directors and Program Leaders reviewed and summarized the County Program Plans and established a Program Framework. The Program Framework includes six Base Program Areas and seven Focus Teams as follows:

Base Program Areas

1. Agriculture Profitability and Viability
2. Business, Community and Economic Development
3. Environmental Quality and Stewardship
4. Family Strengths
5. Nutrition and Health
6. 4-H Youth Development

Focus Teams

1. Commercial Agriculture
2. Community Infrastructure
3. Missouri Enterprise Development
4. Value Added Agriculture
5. Water Quality
6. Missouri Youth and Families at Issue
7. Sustainable Food and Farming Systems

- County Extension Councils, with input from Extension staff, review the County Program Plans on an annual basis.
- Program evaluations are used on a continuous basis to determine outcomes and need for program adjustments.

University Outreach and Extension - Merit Review Process

The Missouri County Extension Councils, under State Statute (Chapter 262, Revised Missouri Statutes) “shall assist in the planning and carrying out of extension programs in their county and

area, making recommendations to the University as they may deem necessary”. The County Program Plans (described under Stakeholder Input) are the basis for this statewide Plan of Work. Each County Program Plan is reviewed and officially approved by the County Extension Councils in the 114 counties.

County Extension Council members are elected and appointed and include in their membership citizens with a wide a wide array of education, experience and expertise. The primary objective of the Merit Review Process is to determine whether the planned programs are relevant and of high quality. Relevance is determined by the extent to which the programs are responsive to the high priority needs of the citizens. The County Extension Councils, utilizing the stakeholder input, analysis of social and economic trends, and the counsel of the regional specialists are in the best position to determine relevancy.

In addition, the County Extension Councils are required to review the current programs annually to determine which programs are to be continued, revised, or terminated. The results of these county reviews are used by program leaders and faculty to determine and implement needed program changes.

Quality of the programming is determined by the response of participants and evaluation of the adoption of new ideas and practices that are embodied in the output and outcome indicators for each of the programs.

We believe the Statutory role of the County Extension Councils in Missouri, combined with their education, experience and knowledge and the knowledge and expertise of regional specialists and campus based faculty is sufficient to meet the requirements of merit review.

FY99 Base for Plan of Work: The FY99 base for this plan of work includes the following:

Smith-Lever 3b&c funding received	\$ 7,611,027
Required State Match	\$ 7,611,027
TOTAL BASE for FY99	\$15,222,054

The following Plan of Work for University Outreach and Extension, University of Missouri includes 260 FTEs and \$17,155,420.

Multi-State Extension Programs for University Outreach and Extension, University of Missouri System: This information will be submitted following receipt of guidelines currently under development.

Integrated Research and Extension Programs, University Outreach and Extension, University of Missouri System: This information will be submitted following receipt of guidelines currently under development.

University Outreach and Extension Program Descriptions

Goal 1: An Agricultural System that is Highly Competitive in the Global Economy

INTEGRATED CROPPING SYSTEMS

Statement of Issues:

- * Crop production in Missouri is extremely diversified in relationship to the type of commodities produced and the size of operations producing those commodities. According to the 1997 Census of Agriculture, approximately 66 percent (i.e. 12,449,272 acres) of Missouri's 28.8 million acres of farmland is dedicated to crop production. The major commodities grown in Missouri are soybeans, corn, and wheat. Other crops grown in the state are sorghum, cotton, barley, rice, and tobacco.
- * Nationally, Missouri ranks fourth in sorghum production and sixth in the production of soybeans and rice. Missouri ranks tenth nationally in the production of corn, cotton and winter wheat. In 1997, these commodities accounted for \$2.1 billion in sales.
- * The production of soybeans, Missouri's largest cash crop, thrives in the southeast, northwest, northeast, and north central parts of the state. Corn, wheat, and sorghum are grown throughout the state. Cotton and rice are grown in the southeast corner of the state.
- * Given Missouri's diversity related to factors such as commodities produced, soil types, broad variations of climate, and size of operations, its producers will face many challenges in the next millennium to maintain their competitiveness on the national and international levels. Some of the challenges that have been identified by Missouri producers relate to adoption of new technology—GMO's, precision agriculture, producing and marketing identity-preserved commodities, improved marketing skills, environmentally sound production, compliance with new regulations, adoption of best management and integrated pest management practices, and maintaining profitability to name just a few.
- * As a result of the University Outreach and Extension Program Development and Deliberative Group Process, 83 Missouri counties have identified, developed, and will implement programs that will address some or all of these issues affecting Missouri's crop producers.

Performance Goals and Indicators:

As a result of Missouri Integrated Crop Production Program:

vvvvvvvvvvvvvvvvvvvv)By 2004, 20,000 agricultural producers will attend at least one educational program on adoption of new technology and at least 25% of those producers will adopt one of these new technologies resulting in reduced soil loss, more efficient pesticide usage, increased profitability, efficiency, and improved environment.

By 2004, 10,000 agricultural producers will attend at least one marketing workshop and at least 30% of those attendees will adopt at least one new marketing strategy.

xxxxxxxxxxxxxxxxxxxx)By 2004, 5000 of Missouri's producers will be producing and marketing identity preserved commodities for niche or value-added markets.

By 2004, 56,000, or 75%, of Missouri's row crop producers will practice environmentally sound integrated crop management in their farming operations.

zzzzzzzzzzzzzzzz)Currently, 7.5% of Missouri's row crop producers are using site specific cropping systems on their operations. By 2004, this will increase to 20% of Missouri's row crop producers will have adopted these practices.

Key Program Components:

- * *Profitable and Environmentally Sound New Technology in Crop Production*
This multi-faceted statewide program will focus on the adoption of new and emerging technologies to optimize production through optimal management of nutrients, herbicides, insecticides, and fungicides. Multiple educational approaches, including workshops, soil-crops conferences, demonstrations, internet, professional development experiences, field days, and educational resources such as guides, slide sets, and power point presentations will be used to deliver these programs.
- * *Tools/Techniques for Marketing Commodities and Differentiated Products*
This program teaches producers to use contractual arrangements, new methods of marketing, how to form a marketing group, how to retain ownership, crop insurance risk management, grain storage, government programs, and use of niche and/or specialty markets. Educational methods used will include workshops, conferences, seminars, Agricultural Electronic Bulletin Board, internet, guide sheets, marketing newsletters, and mass media.
- * *Integrated Crop Management.*
The ICM program will teach producers to use and how to evaluate economic thresholds, scouting, bio-control, pest and crop phenology, rotational usage, variety selection, alternative tillage, host resistance, and other preventive practices for environmentally sound and safe pest management. This will be accomplished through meeting presentations, demonstration plots, applicator training, electronic media-newsletters, and guide sheets.

Internal and External Linkage:

- * The development and implementation of these programs will involve University of Missouri regional and state specialists in agronomy, entomology, plant pathology, IPM, ag economics and agricultural engineering. Extension programs are directly linked to the Missouri Agricultural Experiment Station outlying research centers and farm. In addition, professional staff of the USDA agencies of FSA, NRCS and Crop Reporting Service, and the Missouri Departments of Agriculture and Natural Resources will be involved in various aspects of development and implementation of these programs.

Target Audiences:

The primary target audiences for these programs are:

- * Agricultural producers
- * Agribusiness firms
- * Agricultural lenders
- * Specialty product producers
- * Governmental agencies
- * Industry representatives
- * Certified Crop Advisors
- * Consumers

Program Duration

- * These programs will be implemented and evaluated over the entire length of the Plan of Work (five years).

Allocated Resources:

- * These programs will involve 40% of the total programming effort related to Goal 1.

Goal 1: Program	Year	FTEs	Dollars
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supplemental feed. The program will include workshops, livestock seminars, and demonstrations at the regional research centers, training for regional specialists and state/federal agency staff, mass media, internet, and guide sheets.

b) *Grazing Systems and Pasture Management*

This program will educate producers about management intensive grazing, new forages for grazing, nutrient cycling, forage quality, summer forages, legume persistence, warm-season grass establishment, tall fescue endophyte, and legume establishment into pastures. The educational methods will include regional grazing schools, special field days, guides, and mass media.

c) *High-profit Pasture-based Dairies*

The program will educate dairy producers about grazing management, forage quality for dairies, balancing rations on pasture versus in the dry lot, capital investments, milk barn design, record-keeping, seasonal versus year-round dairies, fence design, watering systems, herd health, fertilization of pastures and improving soil resources. The educational methods will include “Pasture Dairying” schools, cow colleges, manuals, guides, demonstrations, dairy clubs, seminars, and the mass media.

Internal and External Linkages

- * The development and implementation of these multi-disciplinary programs will involve University of Missouri regional and state specialists in agronomy, dairy, farm management, IPM, veterinary medicine, rural sociology, agricultural engineering, and community development. Resources of the outlying research centers in Linneus and Mount Vernon will also be involved in these programs. In addition, professional staff with NRCS, FSA, Missouri Department of Natural Resources, Agriculture, and Conservation will be involved in these programming efforts.

Target Audiences

The primary target audiences for these programs are:

- * Beef producers
- * Dairy producers
- * Forage producers
- * Agricultural lenders
- * Governmental agencies
- * Certified crop advisors
- * Input suppliers

Program Duration

- * The Winter Feeding and Grazing Systems programs will be implemented and evaluated over the entire length of this Plan of Work (five years).
- * The Pasture-based Dairy programs will be pilot tested in the Southwest region over the first three years of the Plan of Work and then, based on evaluation results, may be implemented statewide during the final two years of this planning period.

Allocated Resources:

- * This program will involve 20% of the total effort related to Goal 1 – Globally Competitive Agriculture.

Goal 1 Program	Year	FTEs	Dollars
Forages for 21 st Century	2000	23	\$1,517,770
	2001	23	\$1,517,770
	2002	23	\$1,517,770

	2003	23	\$1,517,770
	2004	23	\$1,517,770

Education and Outreach Programs Underway: (See Summary Statement for Goal 1)

PROFITABLE AND SUSTAINABLE LIVESTOCK PRODUCTION UTILIZATION SYSTEMS

Statement of Issue(s):

- * Several factors have influenced the type of livestock production currently practiced in Missouri. Climate, soil types and terrain, geographic location, availability of markets, environmental regulations, renewable resources such as grain, forages and water, and governmental policies.
- * Missouri's animal agriculture contributed three billion dollars to the Missouri economy in 1997. Meat animals accounted for 64% of the total receipts, poultry/eggs 25%, and the dairy products contributed 10%.
- * Some of the many factors impacting the livestock industry identified by the program development and deliberative group process are animal waste management, air quality, CAFO's, marketing, livestock management, new technology, profitability, record keeping, herd health, consumer education, and water quality.
- * As a result of the University Outreach and Extension program development process, 109 county programs are planned to be implemented and evaluated during this programming period that will address many of the issues impacting Missouri's livestock industry.

Performance goals and Indicators:

As a result of the Profitable and Sustainable Livestock Production Utilization Systems Program by 2004:

vvvvvvvvvvvvvvvvvvvv)15,000 beef producers will attend at least one educational program and at least 25% of those will adopt one new practice to improve/enhance the production efficiency of their beef herd.

wwwwwwwwwwwwwwwwww)Five hundred new producers will adopt production practices that enroll their operations in the Show-Me-Select Replacement Heifer Program.

xxxxxxxxxxxxxxxxxxxx)Two hundred beef producers will conduct the On-Farm Assessment of their farming operation.

yyyyyyyyyyyyyyyyyyyy)1000 producers will improve their production efficiency and profitability by effectively incorporating modern swine production technologies into their operation.

zzzzzzzzzzzzzzzzzzzz)Twenty percent of Missouri's dairy producers will adopt new management strategies that maintain their economic viability.

Key Program Components:

a) Improve/Enhance Production Efficiency of Beef Herds in Missouri

This multi-faceted statewide programming effort will focus on the implementation and evaluation of the Show-Me-Select Heifer, Missouri Steer Feedout, Bull Test, heifer development, cow-calf, and the Missouri on-farm performance testing programs. Topics to be included in these programs are breeding strategies, genetic predictions, EPD, AI, economics, nutrition, animal health, and replacement heifers, to name a few. Educational strategies to be used to implement these programs are workshops,

seminars, demonstrations, field days, farm tours, computer programs, guide sheets, web sites, mass media, and individual consultation.

- b) *Improved Marketing and Financial Strategies for Beef Cattle Producers in Missouri*
This program will focus on enhancing programming related to retaining ownership, production and financial analysis by the implementation of the Retained Ownership and ON-farm Assessment Programs. These multi-faceted programs will educate producers on the following topics – production and nutritional management, economics, animal health, operational assessment, marketing, feedlot management, and retained ownership. Educational methods to be used include feedlot tours, marketing programs, distance learning, ultrasound demonstrations, stocker seminars, workshops, field trips, guide sheets, and use of mass media.
- c) *Swine Production for 21st Century Technology Education and Implementation Programs*
This program is aimed at assisting existing swine producers to adopt new technologies and to remain competitive. Topics to be covered in this program are modern production techniques, artificial insemination, modern waste management, marketing, nutrition, animal health, record keeping, developing niche markets, and labor management. Educational methods that will be used are TEdI teams, individual consultation, seminars, workshops, “success stories,” mass media, Program Implementation Experiences, and individual consultation.
- d) *Enhancing Profitability and Viability on Missouri Family Dairy Farms*
This program is designed to create a critical mass of dairy producers able to integrate new management practices to improve their business and also to maintain the viability of rural communities dependent on these producers. This educational program addresses the educational needs in the areas of financial management, record keeping, family/farm management, herd management, nutrition, herd health, marketing, and niche marketing.

Internal and External Linkages

- * The development and implementation of these programs will involve state and regional specialists in animal science, farm management, agricultural engineering, veterinary medicine, community development and 4-H. In addition, these programs will be implemented in cooperation with the Missouri breed associations, Missouri Department of Agriculture, input suppliers, regional research centers and practicing veterinarians.

Target Audiences

The primary target audiences for these programs are:

- * Beef producers
- * Swine producers
- * Dairy producers
- * Veterinarians
- * Youth
- * Agricultural lenders
- * Agribusiness
- * Governmental agencies

Program Duration

- * The Improved Production Efficiency and Marketing Strategies Program will be implemented and evaluated over the entire length of this Plan of Work.

- * The new swine and dairy programs will be pilot-tested over the first three years of the plan and then will be implemented statewide during the final two years.

Allocated Resources:

- * This program will involve 40% of total programming effort related to Goal 1.

Goal 1 Program	Year	FTEs	Dollars
Profitable and Sustainable Livestock Production Systems	2000	46	\$3,035,540
	2001	46	\$3,035,540
	2002	46	\$3,035,540
	2003	46	\$3,035,540
	2004	46	\$3,035,540

Education and Outreach Programs Underway:

- * All of University Outreach and Extension's field staff are "regional" specialists who have multi-county assignments. A majority of the programming implemented in Missouri would be conducted on a multi-county basis. During FY96-99 educational programs were available in all of the areas included in the FY00-04 plan of work. The research based programs included the following:
 - ♣ Business and Farm Management
 - ♣ Crop Production Systems
 - ♣ Horticulture (Home and Commercial)
 - ♣ Livestock Production Systems
- Results associated with these programs are included in the FY98 Annual Report submitted to CSREES.

Goal 3 – Healthy and Well Nourished Population

Statement of Issue(s):

- * Improved health status is dependent on genetics, environment, quality of health care and the individual's willingness and ability to engage in behaviors known to promote health and prevent disease and injury. University Outreach and Extension programming in support of Goal 3 - A Healthy and Well-Nourished Population – specifically focuses on the health-related attitudes, knowledge, skills and practices of individuals. Missouri Extension efforts in support of this goal are based on stakeholder input obtained through a deliberative group process and discussions with county extension councils. Nutrition, food safety, healthy lifestyles and health care access were identified as critical issues in 42 % of Missouri's 115 counties. This programming also relates to goals established for CDC's *Healthy People 2000 and 2010*.
- * Obesity, poor eating habits and physical inactivity are known risk factors for a number of chronic health problems including heart disease, stroke, diabetes, and some forms of cancer. An estimated 32% of adult Missourians are obese and only 21% consume the recommended five portions of fruits and vegetables daily. Less than 18% of Missourians exercise regularly enough to meet CDC recommendations and over 30% engage in no physical activity. It is estimated that about 1/3 of all Missouri children have at least one known risk factor for heart disease -- smoking, high-fat diets, or physical inactivity. There is great opportunity to assist Missouri residents improve their health and quality of life through offering educational programs related to dietary guidelines, healthier eating, and behavior change strategies for incorporating physical activity into daily activities.

- * Preventing foodborne illness involves the safe storage, handling, and preparation of food. In 1997, there were about 3,400 reported cases of foodborne illness in Missouri resulting in 482 hospitalizations and 3 deaths. These numbers reflect the tip of the iceberg because of under reporting. USDA has identified key "control points" at which consumers in the home can help keep food safe: purchasing, storing, pre-preparation, cooking, serving, and handling leftovers. Similar control points exist for food handlers such as restaurant chefs, cooks in day care centers and schools and food handlers at community/church suppers and county fair booths. Taking appropriate action at these critical points can prevent foodborne illness. Extension programs will help residents maintain a safe food supply by providing educational programs and resources that provide information, improve decision making and increase skills related to food buying, preparation and handling.
- * Staying healthy requires health consumers to assume more responsibility for their health and health care. The United States spends an estimated \$200 billion a year on unnecessary and inappropriate care. Health consumers need to learn skills that will help them reduce their demand for unnecessary care, while encouraging the more appropriate use of preventive health services. Seventy percent of all doctor visits for new problems have been termed unnecessary. On the other hand, many individuals fail to use appropriate preventive health services. Based on 1997 data, an estimated 30% of Missourians over age 65 did not get their yearly flu shot, 56% reported never having a pneumonia vaccination. Seventy-five percent of Missourians 50 years of age and over reported that they had not done a home blood-stool test, a screening for colon/rectal cancer, during the past two years. Thirty percent of women in the same age category reported they did not have a mammogram during the last two years. Medical self-care increasingly is being recognized as an important component of health promotion programming. Extension programs will increase consumer's skill in communicating with their health care providers and improve their ability to make sound self care decisions such as when to seek professional care and how to apply home treatment safely and effectively.
- * While the life expectancy of the general population has benefited from increased emphasis on lifestyle behaviors, this is not the case for that portion of the population that is low income. There is great diversity in the low-income population. Eighteen percent work full-time, year round. Almost one-third are from minority populations, 38% are children and 10% are elderly. Low-income individuals are more likely to have poor diets, delay seeking health care and less likely to have a regular source of care. They are also less likely to receive early routine and preventive health care that would help with early detection and reduction of risk. Children are at particular risk. Poor children are more likely than middle and upper class children to be hungry, have nutritional deficiencies, have more physical and mental health problems and do less well in school.
- * In addition to family income, health insurance and place of residence are associated with an individual's ability to obtain health care. An estimated 15% of Missouri's adult population between the ages of 18 and 64 are without health insurance. Rural Missourians are less likely to have health insurance provided as a benefit by their employers. Implementation of the MC+ for Kids program in Missouri will increase access to care for the 90,000 children under the age of 19 who are without insurance. However, a shortage of providers in rural Missouri may make participation in the MC+ for Kids program difficult for eligible children. Sixty-five counties, parts of counties and

some inner-city areas have been defined as Primary Health Care Professional Shortage Areas. Most of these shortage areas are in rural Missouri.

- * Decisions and choices about health and health care are some of the most difficult for individuals to make. They affect one's ability to engage in behaviors that maintain quality of life and gain access to quality health care. Enabling individuals to maintain lifestyle changes over time requires a two pronged effort: helping the individual learn information and skills needed to make changes and working with community structures in order to create environments that are more conducive to maintaining health and desired behavior change. Outreach and Extension plans to address both of these issues by increasing individual and community access to health information and education resources. Emphasis will be placed on identifying education resources that reflect the diversity of our population.

Anticipated Impact:

The overriding goal of all educational programming in the areas of nutrition and health is to cause permanent behavior change of Missouri citizens in regard to nutrition, health promotion, food safety, and physical activity practices. This is very difficult, but educational programs in these areas are expected to impact 3,060 citizens. Nearly 60,000 will receive educational information; 20-60% will gain skill and knowledge, depending upon the specific program; 10-25% will indicate their intention to adopt recommended practices

Performance Goal 1 – To annually increase through non-formal education programs consumer awareness, knowledge and skills related to nutrition and dietary practices known to reduce health risk factors (e.g., obesity, hypertension, etc.).

Indicators:

Output Indicators

- ♣ 55,000 individuals will participate in non-formal educational programs related to nutrition, dietary practices and healthy eating.
- ♣ 20% of program participants will report an increase in knowledge about nutrition and dietary practices known to promote health and prevent disease based on pre/post evaluations.
- ♣ 15% of program participants will report learning specific skills that will improve their ability to eat healthier
- ♣ 10% of program participants will report that they intend to adopt recommended nutrition practices.

Outcome Indicator

- ♣ 5% of program participants will adopt recommended nutrition practices.

Key Program Components:

- * A Healthy New You -- A Healthy New You teaches clients the benefits of healthy eating and a physically-active lifestyle, the basic principles of good nutrition and physical fitness, the keys to attaining a positive self-image and body image, how to make and maintain healthy lifestyle changes, and how to involve family, friends, and community in leading a healthier life. The program curriculum consists of four (4) lessons, which cover the main topic areas of healthy eating, active living, and positive self-image.
- * Show-Me Body Walk -- Body Walk is a traveling 25' X 30' walk-through exhibit that represents the human body. The exhibit provides resources to teachers and an action-oriented educational experience for elementary-aged students. As they walk through the exhibit, students engage in activities that emphasize the importance of good nutrition and

other healthy lifestyle choices. The workshops presented to teachers focus on strategies to increase the effectiveness of nutrition and food safety education efforts in the classroom.

- * *Nutrition Communications Center* (formerly the Resource Network) -- Extension Specialists and other professionals need reliable, credible, science-based information on health and nutrition to improve the quality of people's lives and improve the economic health of the state and individual. The center's goal is to assist regional specialists and others to stay current on research, demographics, and consumer trends in food and lifestyle habits. Educational strategies include responding to individual questions and requests for information, providing subject matter updates via a listserv; providing and supervising the content of the web site; editing a quarterly newsletter; recording radio, and video interviews for statewide dissemination; and scheduling quarterly teleconferences with regional specialists.
- * *Missouri Nutrition Network* -- The Network is a coalition of public and governmental organizations that utilizes a social marketing approach to promote healthy eating. The primary target audience is low-income (Food Stamp eligible) families. The Network provides local partners with media campaign materials, personnel training, and grant funding to conduct a healthy eating campaign in their own communities. The current campaign theme "It's All About You, and Your Family, Too!" promotes three nutrition practices: increasing consumption of fruits and vegetables, increasing consumption of breads, grains, and cereals, and lower-fat methods of cooking meats.
- * *Regional Nutrition Education Workshops* -- In addition to statewide programs, regional specialists conduct a number of nutrition education workshops to address locally identified needs and interests. Topics range from sports nutrition to the role of nutrition in disease prevention. One on One for Kids, a basketball and education camp sponsored by Children's Mercy Hospital in Kansas City, is an example of one such program. As part of this camp, Extension Specialists in the West Central Region conduct a sports nutrition class for the campers. During the 30-minute class, campers are taught the basics of two major sports nutrition concepts -- fluid retention for pre/during/post events and healthy energy boosting snack choices for pre-event. Extension has been involved in this effort for three years and evaluations of the camp indicate that the sports nutrition segment is among the highest rated components by the campers and the coaches. A similar program has been developed to provide information to teen athletes.

Internal and External Linkages:

- * Linkages vary, to some extent, depending on the program. The team involved in developing the Healthy New You curriculum includes HES regional and state specialists, the health education specialist (School of Medicine) and the nutrition and health specialist from Lincoln University. The Body Walk program was developed in conjunction with the Governor's Council on Physical Fitness. The University of Missouri HES Extension Food and Nutrition Program serves as program manager and regional HES and 4-H youth development specialists work with local schools and parent volunteers in setting up the exhibit in the schools. Existing partners in the Nutrition Communications Center include the School of Medicine, Dept. of Rural Sociology, School of Journalism, Dept. of Dietetics, and the Dept. of Biological Sciences, all at the University of Missouri-Columbia (MU). Other partners include the Missouri Department of Health, Lincoln University, and state extension offices nationwide (via web and listserv communication). Partners involved in the Missouri Nutrition Network include

state and regional nutrition/HES specialists, the Missouri Departments of Health, Elementary and Secondary Education, and Family Services and, at the local level, county health departments, hospitals, community colleges, social service agencies, health coalitions, businesses and churches.

Target Audiences:

- * The target audiences for A Healthy New You include adults who have been unsuccessful with dieting and want to reduce health risk factors through a different approach to eating healthy and being physically healthy. The program is also appropriate for those interested in learning basic principles related to eating healthy and incorporating physical activity into their daily lives. K-4 elementary teachers and their students are the target audiences for Body Walk. Target audiences for the Nutrition Communications Center are regional extension specialists and county extension staff, Missouri citizens, colleagues in related fields, and media outlets. The target audience for the Missouri Nutrition Network is low-income (Food Stamp eligible) families. One-on-one for Kids reaches school-age children as well as coaches.

Program Duration:

- * A Healthy New You is a new program and will be a long-term effort (five or more years). Body Walk and the Nutrition Communication Center have been in existence for some time and both are expected to continue long term. The Missouri Nutrition Network is also a relatively new effort and is a long-term integral component of educational programming in nutrition at the state level. One-on One for Kids is in its 3rd year and based on evaluations is likely to continue long term.

Allocated Resource:

- * Effort among these major efforts is allocated as follows:
 - 25% Healthy New You
 - 25% Body Walk
 - 25% Nutrition Communications Center
 - 10% Missouri Nutrition Network
 - 15% Regional Educational Workshops

- * This performance goal constitutes 70% of the resources allocated to Goal 3.

Goal 3: Performance Goal 1	Year	FTEs	Dollars
Nutrition and Dietary Practices	2000	15	\$988,500
	2001	15	\$988,500
	2002	15	\$988,500
	2003	15	\$988,500
	2004	15	\$988,500

Education and Outreach Programs Underway: (See Summary Statement at the end of Goal 3)

Impact Statement:

Small farmers in Missouri will be more knowledgeable about methods of marketing and adding value to their agriculture products. The aforementioned programs will continue providing a base of educational and social support for farm families, thus enabling them to become more confident and more willing to try these new methods, and more able to be supportive of their communities.

Performance Goal 2 - To annually reduce food-borne illnesses through non-formal education programs focusing on improved decision making and increased skills related to food buying, handling and preparation.

Indicators:

Output Indicators

- ♣ 1,500 Missourians will participate in non-formal education programs focusing on food safety issues.
- 60% of participants completing programs will demonstrate increased knowledge of basic food safety principles based on pre/post evaluations.
- 40% of participants completing programs will report they have learned specific skills that will improve their ability to handle foods safely.
- 25% of participants completing programs will report that they intend to adopt recommended food safety practices.
- 25% of participants completing the programs will report that they intend to adopt recommended food safety practices.

Outcome Indicator

- 10% of participants completing programs will report that they adopted one or more recommended food safety practices.

Key Program Components:

- * Food safety programming at the state level has focused on providing technical training to state and local sanitarians, particularly in the use of HACCP-like techniques. In addition, HACCP training for meat processors has been offered to meet the mandatory requirements of the USDA, and will continue to be a major activity of the program for the next year. In addition, HACCP training will be expanded to include managers, seafood processors and food service operations in the next year. Food safety efforts at the regional level emphasize food preservation, food preparation for the occasional quantity cook, and food safety programs for food service workers. Program methods include responding to individual questions, providing educational fact sheets, offering educational workshops such as the “ServSafe” Program and other similar training activities, and providing newsletters such as *Quality for Keeps* which has been an efficient and effective way to deliver safe home food preservation information. Programs have also been offered to Head Start cooks, Girl Scout leaders and representatives from non-profit organizations such as the Lion’s club, church groups and others whose members prepare and serve food to people at fairs, festivals, or food stands.

Internal and External Linkages

- * Internal partners include regional nutrition specialists, state nutrition specialists from MU and Lincoln University, and local extension councils who pay for the printing of the *Quality for Keeps* newsletter. External partners include the environmental sanitarians in local health departments, the Missouri Department of Health and the Missouri Restaurant Association. In addition, collaborative efforts among the Missouri Department of Agriculture and Department of Economic Development support several programs.

Target Audiences

- * Target audiences include professionals in the food processing and retail food service industry, homemakers, representatives of not-for-profit organizations including churches, Lions Club, Girl Scouts, etc., and food service staff in schools and child care programs.

Program Duration

- * The professional development program for sanitarians has been in place for a number of years and is expected to continue for some time. HACCP programs are also expected to continue for the food industry for the near future as the use of HACCP to assure food safety becomes normative in the industry. However, the audience will expand away from the purely technical towards the managerial, marketing and consumer portions of the population. The two regional programs mentioned, ServSafe and *Quality for Keeps*, are successful programs and will continue to be used long-term by regional specialists involved in food safety education.

Allocated Resources:

- * Resources allocated to this goal are distributed among major programs as follows:
 - 10% Professional development
 - 10% HACCP training
 - 30% ServSafe and other similar programs.
 - 25% Quality for Keeps
 - 25% Food preparation for the occasional quantity cook
- * Total resources allocated to this performance goal constitute 10% of the total for Goal 3.

Goal 3: Performance Goal 2	Year	FTEs	Dollars
Reduce food-borne illnesses	2000	2	131,800
	2001	2	131,800
	2002	2	131,800
	2003	2	131,800
	2004	2	131,800

Education and Outreach Programs Underway: (See Summary Statement at the end of Goal 3)

Impact Statement:

Under-served populations will become more aware of the potential for illness associated with inadequate storing, handling and cooking habits. They will also learn how to identify acceptable food outlets, and shop for nourishing and affordable food items. Inter-generational programming will reach all members of target households who participate in these programs, and will help them associate good health with good food choices. Limited resource populations will therefore require less emergent medical intervention for illness such as food poisoning and malnutrition.

Performance Goal 3 – To annually increase health consumers’ awareness, knowledge and decision making skills with regard to health practices known to promote health and prevent disease, with an emphasis on increasing physical activity.

Indicators:

Output Indicators

- ♣ 3,200 Missourians will complete non-formal education programs focusing on physical activity and other behavior practices known to promote health and prevent disease.
- ♣ 30% of participants completing programs will demonstrate increased knowledge of strategies for incorporating into their daily lives behavior change practices known to promote health and prevent disease.
- ♣ 15% of participants completing programs will report they have learned behavior change and/or decision making skills.

- ♣ 10% of participants completing programs will report they intend to adopt recommended practices.

Outcome Indicators

- ♣ 5% of participants completing programs will report they adopted one or more recommended practices.

Key Program Components:

- * A Healthy New You - See Performance Goal 1 for a description of this program. A Healthy New You is interdisciplinary in nature and addresses physical activity and positive body image in addition to focusing on healthy eating.
- * National Network for Health - NNH is a multi-state project. It is one of 5 networks originally developed as part of CYFERnet to provide technical assistance to State Strengthening and Youth and Risk projects. The health education specialist, School of Medicine and an HES nutrition specialist provide leadership for a work group responsible for identifying and placing resources and research related to health promotion and disease prevention on the NNH web site. Emphasis is placed on resources and research developed through extension and land grant universities. In addition, the health education specialist serves on the NNH Management Team.
- * Take Care: A Medical Self-Care Workshop for Young Families - This workshop series provides participants with basic consumer health information and increases their health care decision making skills. In order to make effective self-care decisions, people must have access to reliable health information and they need access to that information when a health problem arises. In order to accomplish this, Take Care teaches skills related to using a good reference to make health care decisions and provides information on how to improve patient-doctor communication. In addition to increasing parents' confidence in making health care decisions, the information provided will help parents work more effectively in a managed health care environment. Follow-up newsletters reinforce the information provided in the workshops. Easy to read fact sheets have been developed and these are being translated into Spanish. Low-income parents have been reached by working with community agencies and organizations such as the Head Start, Community Action Agencies and Health Departments.
- * Regional Education Workshops -- Working in conjunction with local partners, regional specialists carry out a variety of educational programs related to health promotion and disease prevention. Following are examples of efforts that are likely to continue and have potential to be replicated in other parts of the state.
- * CHARTwalk: Off and Walking – CHARTwalk is the result of a community partnership called the Northeast Community Health Assistance Resource Team. With a goal of achieving cardiovascular health, the task force launched this regional walking program in 1997. The initiative's main objective is to motivate people to become physically active. The walking program is only one effort of the Northeast Missouri CHART. In order to encourage walking as a physical activity that promotes cardiovascular health, this group has also held a conference and assisted in the development of two work site wellness programs. A quarterly newsletter is published and a Web page is under development.
- * Glo-Germ Hand Washing Mini-Lesson -- One of the best and simplest ways to reduce the risk of spreading illnesses such as the cold and flu is by proper and frequent hand washing. The Glo-Germ Hand Washing Mini-Lesson helps children understand that washing hands thoroughly with soap and warm water is necessary to get rid of "germs."

Included with the lesson materials are a teaching outline with suggested script and optional activity pages suitable for children of different ages. Schools can borrow the Glo-Germ Kit from extension or use substitutions that are suggested in the lesson materials. While the mini-lesson was designed for use by school nurses and teachers it has also been used in adult training programs.

Internal and External Linkages:

- * Internal partners include Regional HES/nutrition specialists, state HES nutrition and family and consumer economics specialists, the health education specialist from the MU School of Medicine and the nutrition and health specialist from Lincoln University. Subject matter support is provided by the MU School of Education, Department of Physical Education and Health and by the MU School of Medicine. External Partners include the Missouri Department of Health, county health departments, hospitals, public and parochial schools, churches, community action agencies, local businesses, Head Start, and Community Health Assistance Resource Teams and other local health coalitions.

Target Audiences:

- * Target audiences for this goal include school-age children, older adults, African-Americans and individuals with limited resources. Specific audiences for the “Healthy New You” program are young and middle age adults. Audiences for the “Take Care” program include parents with young children, older adults, and Hispanics.

Program Duration:

- * The majority of the programs related to this goal are long-term. “Healthy New You” is a new program and is being planned as a long-term effort. Medical Self Care has been an on-going effort in our system and will continue long term. CHARTwalk is the result of a community partnership and its long-term existence is dependent on the success of the coalition. National Network for Health is anticipated to be a short-term effort as is the Glo-Germ Hand Washing Mini Lesson.

Allocated Resources:

- * Percent of time for each major effort is as follows:

30% A Healthy New You
 20% Take Care
 20% NNH
 30% Regional Efforts

20% of Goal 3 program effort is allocated to this performance goal.

Goal 3: Performance Goal 3	Year	FTEs	Dollars
Consumer Health Knowledge/Practices	2000	5	\$329,500
	2001	5	\$329,500
	2002	5	\$329,500
	2003	5	\$329,500
	2004	5	\$329,500

Extension and Outreach Programs Underway:

- * All of University Outreach and Extension’s field staff are “regional” specialists who have multi-county assignments. A majority of the programming implemented in Missouri would be conducted on a multi-county basis. During FY96-99 educational programs were available in all of the areas included in the FY00-04 plan of work. The research based programs included the following:

- ♣ Comprehensive School Health Nutrition Education and Services
- ♣ Decisions for Health

Results of these programs are included in the FY98 Annual Report submitted to CSREES

Impact Statement:

Limited resource audiences will learn how to make better food choices at retail grocery outlets and by supplementing food purchases with home-grown fruits and vegetables; the importance of combining proper diet with exercise regimens for improved health; and how improved health benefits the body as it ages. Through increased knowledge about healthy living, people in target populations will be less likely to require medical intervention for chronic diseases attributed to unhealthy food intake, substance abuse and lack of exercise. Target populations in Missouri will be positioned to enjoy graceful aging that was once prevented by social, economic and cultural barriers.

Goal 4: Harmony Between Agriculture and Environment

PROTECTING MISSOURI'S WATERSHEDS

Statement of Issue(s):

- * The safe production of food and fiber is vital to Missouri agriculture and the State of Missouri. More than 13 million acres of Missouri farmland is planted and harvested cropland. Missouri farmers must be able to profitably sustain this vital industry, while protecting and rebuilding the productivity of this very valuable natural resource--soil.
- * Erosion control and soil conservation was identified by 22 counties as a key issue to be addressed by University Outreach and Extension during the Deliberative Group Process. The need for continued education and demonstration on the short and long-term environmental, economic, and agronomic impact of conservation or reduced-till and no-till crop production was identified as a major aspect of that programmatic need.
- * The major educational needs that have been identified related to this programming effort are the complex interactions between weeds, herbicides, pesticides, soil type, water and the relationship of soil structure to plant nutrition, plant development, biological activity, erosion control, economics, and tillage alternatives.

Performance Goals and Indicators:

vvvvvvvvvvvvvvvvvvvvvv)By 2004, 70 percent of Missouri's farms will adopt some type of no-till or reduced tillage production system.

wwwwwwwwwwwwwwwwww)By 2004, 12,000 Missouri producers will attend an educational program on adoption of tillage alternatives and at least 25% of those producers that attend will adopt at least one new production strategy.

xxxxxxxxxxxxxxxxxxxx)By 2004, producers that attend these educational programs will adopt site and crop specific management systems on 30% of their no-till acres.

Key Program Components:

- * Nutrient Pesticide management and Tillage
This program will teach producers about the appropriate use of nutrients, herbicides, insecticides, and fungicides for specific tillage alternatives. Educational methods will include conferences, soils and crops conferences, demonstrations, mass media, guides.

* *Tillage Systems for Profit and the Environment*

This educational and research program will focus on site specific agriculture, conservation tillage practices, residue management, planter adjustments and attachments, pest control, and economic and management strategies for each alternative. Educational methods to be used will be soil and crop conferences, no-till clubs, lender/farm manager programs, demonstrations, newsletters, mass media and guides.

* *Residue Management*

This program will educate producers about implementing cost-effective terrace systems, constructing terraces with readily available equipment, use of ridge tillage to reduce erosion and improve water quality, using contouring and contour strip cropping, and managing terraces and waterways. Educational methods used will include workshops, demonstrations, one-on-one consultations, newsletters, direct mailing, mass media, and guides.

Internal and External Linkages:

- * The development and implementation of these programs will involve University of Missouri regional and state specialists in agronomy, entomology, plant pathology, soil science, ag economics, and agricultural engineering. In addition, the programming will be a cooperative program with NRCS and the Missouri Soil and Water Conservation Districts.

Target Audiences:

- * The primary target audience for these programs will be:
 - Agricultural producers
 - Agribusiness
 - Agricultural lenders/farm managers
 - Soil and Water Conservation District staff
 - Certified crop advisors
 - Farm equipment dealers

Program Duration:

- * This program will be implemented and evaluated over the entire length of this programming period.

Allocated Resources:

- * This program will involve 20% of the total programming effort related to Goal 4. Staff programming effort will be allocated in the following manner:

Goal 4 Program	Year	FTEs	Dollars
Protecting Missouri's Watersheds	2000	7	\$461,930
	2001	7	\$461,930
	2002	7	\$461,930
	2003	7	\$461,930
	2004	7	\$461,930

Extension and Outreach Programs Underway: (See Summary for Goal 4)

ANIMAL WASTE MANAGEMENT

Statement of Issue(s):

- * Livestock/poultry is a multimillion-dollar business in the state. Large numbers of hogs, dairy cattle, poultry, and some beef cattle are concentrated in confinement units. The

poultry industry is expanding rapidly. The Missouri approach to waste management, designed and implemented by University Extension, MDNR and NRCS, has been successful.

- * MDNR reports that all of the livestock's dairy and poultry facilities operating under this program constitute a waste management equivalent to that generated by six million people – more than the whole population of the state. Successful as the waste management program may be, much can be accomplished in educating producers and developing new ways of utilizing animal and poultry waste to prevent ground and surface water contamination.
- * Missouri soil types and topography are very diverse, ranging from rolling wind-blown loess and river bottoms to fractured karst topography overlain with shallow, rocky clay and drainage features such as caves and sinkholes. There is no single strategy for educating livestock producers regarding the potential for water degradation from land application of agricultural waste.

Performance Goals and Indicators:

vvvvvvvvvvvvvvvvvvvvvv)By 2004, University Outreach and Extension will train 1,500 poultry and livestock producers in best management practices for land application of animal waste to balance crop nutrients and prevent runoff. Fifty percent of these producers will develop and implement total nutrient management systems that will meet guidelines set forth by MDNR.
wwwwwwwwwwwwwwwwww)By 2004, University Outreach and Extension will train 50 consultants and technicians in the private sector to write nutrient management plans.

Key Program Components:

- * Livestock Nutrient Management
This program will train producers how to develop a nutrient management plan for their production systems. Topic to be covered will include soils, nutrient application scheduling, regulatory compliance, and manure application alternatives. Education methods to be used will be producer meetings, training of regional specialists, demonstrations, one-on-one consultations, mass media, and guides.
- * Missouri's Manure Management
Missouri Manure Management is an interagency program that is designed to provide producers, technical agencies, educational institutions, researchers, and the general public with usable, accurate, and environmentally-sound manure management and application information. An electronic clearinghouse will be used to: 1) provide access to comprehensive information on manure management research and application; 2) identify relevant manure management publications and educational program.
- * Training Professionals In Manure Management
This program will focus on training professionals to assist producers in the technical design of facilities and structures, and the development of nutrient management plans that will bring those producers into compliance with state and federal regulations governing manure management and application.

Internal and External Linkages:

- * Internal implementation of this program will involve agronomy, agricultural engineering and animal sciences. External involvement will include NRCS, MDNR, and livestock commodity organizations.

Target Audiences:

- * The primary target audience for these programs will be:

Program Duration:

- ### Allocated Resources:

- | Goal 4 Program | Year | FTEs | Dollars |
|-------------------------|------|------|-----------|
| Animal Waste Management | 2000 | 15 | \$989,850 |
| | 2001 | 15 | \$989,850 |
| | 2002 | 15 | \$989,850 |
| | 2003 | 15 | \$989,850 |
| | 2004 | 15 | \$989,850 |

NUTRIENT MANAGEMENT ON MISSOURI CROPLAND

- * More than 13 million acres of Missouri land produces row crops and forages. According to the Census of Agriculture, \$576 million of fertilizer and chemicals were applied to those acres in 1997.
- * In Missouri, about 34 percent of the population obtain their water supply from groundwater while 66 percent obtain their water supply from major rivers and reservoirs. Groundwater is the source of 74 percent of all rural, domestic water. Indiscriminate application of nutrients and pesticides on this 13 million acres can result in water degradation of this very important drinking water supply.
- * Of the 877,722 acres under irrigation in Missouri, 80 percent are located in the southeast corner of the state. Fewer than 10 percent of the irrigators use scheduling methods to determine the proper time to irrigate. In addition, Chemigation (application through irrigation) has been added to many of these systems and more irrigators are expected to adopt this technique of chemical application. Many of these systems lack proper safety devices to prevent backflow contamination.
- * During the University Outreach and Extension program development process, Missourians identified safe management and application of chemicals and nutrients as issue to be addressed in Missouri's water quality programming in 57 counties.

* As a result of the Nutrient management on Missouri Cropland Program, by 2004:
vvvvvvvvvvvvvvvvvvvv)15,000 farmers and 1,000 commercial applicators will be learn how
pesticides can or may interact and move in soils and how to help preserve ground
and surface water quality when using pesticides and fertilizers. Thirty percent of
these clientele will adopt best management practices.

www)Seventy-five percent of Missouri Farm acreage will be under pest management practices and site specific applications that will reduce potential pesticide runoff.

xxxxxx)1500 farmers will be trained about well-head protection, tail-water recovery, and Chemigation safety. Fifty percent of those clientele will make changes in their management practices.

Key Program Components:

* *Pesticide and Nutrient Management.*

This program will focus on soil testing and interpretation, best management practices, pesticide application, secondary containment, container/waste product disposal, mixing procedures, record keeping, and safety. Educational methods will include watershed assessment, demonstrations, water quality workshops, soils and crops conferences, commercial applicator training, self-study manuals, guides and educational materials, and mass media.

* *Site Specific Application*

Under the direction of the Missouri Precision Ag Center, producers and commercial applicators will receive training on site specific application. The training will include equipment selection and calibration, field mapping, calibration, employee training, economics, and GPS instrumentation. Educational methods will include demonstration projects, workshops, Precision Ag seminars, applied research projects, guides, and mass media.

* *Irrigation, Chemigation, and Well Development*

This program will focus on training irrigators to use scheduling to optimize water usage, installing well-head protection, economics of irrigation, safe chemigation, equipment selection, and tail-water recovery systems. The education methods that will be used are annual irrigation conferences, irrigation scheduling, safe chemigation and wellhead protection demonstrations, educational support of the Irrigation Associates, guides, and mass media.

Internal and External Linkages:

- * The development and implementation of this program will involve the Missouri Precision Ag Center, Water Quality Focus Team, regional and state specialists in agronomy, agricultural engineering, and farm management. In addition, the programming will involve NRCS staff, Missouri Irrigation and Water Management Associates, Missouri Departments of Agriculture and Natural Resources, Missouri Ag Industry Council, and commodity associations.

Target Audiences:

- * The primary target audiences for these programs are:
 - Agricultural producers
 - Irrigation dealers
 - Commercial applicators
 - Certified crop advisors
 - Government personnel
 - Agribusiness firms
 - Landowners

Program Duration:

- * These programs will be implemented and evaluated over the entire length of this Plan of Work.

Allocated Resources:

- * These programs will involve 40% of the total programming effort related to Goal 4.

Goal 4 Program	Year	FTEs	Dollars
Nutrient Management on Missouri Cropland	2000	15	\$989,850
	2001	15	\$989,850
	2002	15	\$989,850
	2003	15	\$989,850
	2004	15	\$989,850

Extension and Outreach Programs Underway:

- * All of University Outreach and Extension's field staff are "regional" specialists who have multi-county assignments. A majority of the programming implemented in Missouri would be conducted on a multi-county basis. During FY96-99 educational programs were available in all of the areas included in the FY00-04 plan of work. The research based programs included the following:
 - ♣ Water Quality
 - ♣ Hazardous (Toxic) Materials
 - ♣ Nutrients and Bacterial Wastes
 - ♣ Surface/Groundwater and Watershed Protection
 - ♣ Natural Resource and Environmental Management
 - ♣ Solid Waste Disposal
- * Results of these programs are included in the FY98 Annual Report submitted to CSREES

GOAL 5: Enhanced Economic Opportunity and Quality of Life for Americans

Goal 5: I. Missouri Children, Youth and Family (MOCYF) Project

Two Major Program Efforts:

- A. Effective Black Parenting Series**
- B. Public Policy Lending Library**

Overall Statement of Critical Issues to be Addressed:

- * Beginning in November 1997, an Organizational Change Survey was conducted to document the current state of and changes in Missouri's ability to develop and sustain effective programs within the University Outreach and Extension system. This survey, developed by the University of Arizona, looked at issues surrounding one of the main objectives of the **MOCYF Project**: improving University Outreach and Extension's capacity to support community-based programs for children, youth and families at risk. Of the 300 eligible respondents, 75% returned completed surveys. Of the 248 respondents, over half (57%) reported that they are called upon *monthly* in the area of children, youth and families at risk. Eighty-one percent (81%) of respondents stated that they are currently active in community task forces working on children, youth and family issues.
- * The national trends also mirror Missouri's response to issues pertaining to the knowledge of policy which effects the lives of children, youth and families at risk. The National Results indicate that Extension professionals were not at all confident about their

knowledge of policy and legislation affecting lives of the children, youth and families they serve. While a majority (64%) of respondents believe it is their role to educate policy makers on youth and family issues, only one-fourth feel they currently have good or excellent knowledge of policy affecting the lives of such audiences

- * Diversity assessments in three of the eight administrative regions revealed that Outreach and Extension personnel are aware of the nature of diversity in their counties, particularly with regard to race, ethnicity, socio-economics status, age, gender and disability. However, present programming in these regions tends to reach the more affluent, middle class, white, non-disabled citizens who are middle-aged or older. Though only three of the eight assessments are completed, the assessments affirm what the Organizational Change Survey summarizes - University Outreach and Extension staff need continued administrative and community support as they continue working with increasingly diverse citizens in Missouri communities.
- * In November 1998, the Executive Summary of KIDS COUNT 1998 Data stated that while the number of Missouri children receiving cash assistance decreased from 1992 and 1997, many of those children still live in poverty, as their parents replace welfare with low-paying employment. The **MOCYF Project** is ready to build upon the existing strengths and resources in existence and provide training and resources regarding effective programming for low income audiences within each region in Missouri.

EFFECTIVE BLACK PARENTING SERIES:

(See above for overall statement of issues.)

Performance Goals and Indicators:

Output Indicators

- * 50 parents or caregivers (per year) will complete 75% of the Effective Black Parenting classes, a 15 week series.
- * 75% of the parents attending classes will learn problem solving skills when dealing with their child(ren); and at least one other life skill (e.g., setting goals) that will enable them to become more productive citizens

Outcome Indicators

- * 75% of the parents attending classes will report changed behavior or intent to change their behavior in communicating with their child(ren)..

Key Program Components:

- * Eight communities will provide culturally sensitive parent education classes for low-income parents. The classes will utilize the Effective Black Parenting Series. The classes will be conducted by UOE staff with the involvement and representation of a variety of agencies (e.g., Court Appointed Services). MOCYF Project staff will assist colleagues in learning about the Effective Black Parenting series, training and resources. In addition, an evaluation consultant will provide technical assistance to UO/E field staff regarding parent education evaluation and program design for high-risk families.

Internal and External Linkages:

- * Interdisciplinary - At the current time the Effective Black Parenting series has been facilitated by a variety of trained University Outreach Specialists representing Consumer and Family Economics, 4-H Youth Development and Human Development and Family Studies, et al.

- * Multi-institution - The Effective Black Parenting programming conducted by MOCYF Project staff was originally conducted by a specialist from Lincoln University. While MOCYF staff has since undergone EBP Facilitator's training, the LU Specialist continues to serve in partnership with MOCYF staff regarding the EBP programming. The MOCYF Project site in Southeast Kansas City has partnered with the University of Missouri-Kansas City for evaluation services of the EBP program. In addition, the Principal Investigator has expressed a desire to continue a partnership with UO/E staff in the KC area to explore resources for future EBP classes.

Target Audiences:

- * African-American parents and caregivers (e.g., grandmothers)

Program Duration: Long-term

Allocated Resources: See Summary for Goal 5, I-VIII

Extension and Outreach Programs Underway: (See Summary for Goal 5, I-VIII)

PUBLIC POLICY LENDING LIBRARY

(See above overall statement of issues to be addressed. In 1998, approximately 64% of UO/E staff responded to a survey and stated that they felt it was their role to inform decision makers about policies that effect children, youth and families. However, only one fourth of those respondents felt they had a good knowledge about how policy effects children, youth and families.)

Performance Goals and Indicators:

Output Indicators

- * Eight targeted communities (one per region) will host National Issue Forums, hosting 15-25 community members and utilizing the deliberative process and/or National Issues Forum documents provided by the Public Policy Lending Library.
- * The UO/E system will increasingly become aware of changes in public preferences expressed at forums. Consequently, UO/E will plan to use the dialogue (i.e., citizen opinions) to adapt decisions regarding UO/E resources and programming

Outcome Indicators.

- * National Issue Forum facilitators will involve one to two hundred citizens in forums. Of those, at least 50% will maintain or increase their role as an active community member.

Key Program Components:

- * University Outreach and Extension staff will become more knowledgeable and involved in policy issues which effect children, youth and families through the increased awareness and availability of public policy resources. Information regarding policy will be also be shared through the **MOCYF** National Issues Forum (NIF) Lending Library, Poverty at Issue (HES) WWW site, electronic distribution lists and publication.

Internal and External Linkages:

- * Interdisciplinary - The program draws will involve University Outreach Specialists representing Consumer and Family Economics, Community Development, Agriculture, 4-H Youth Development and Human Development and Family Studies, et al.
- * Multi-institution - We anticipate a continued partnership with Lincoln University, especially when working in communities where high poverty rates exist (e.g., Pemiscott County, SE Kansas City, etc.)

Target Audience:

- * Community Leaders (including University Outreach Extension Council members) promoting public dialogue regarding issues that effect the quality of life for children, youth and families.

Program Duration: Long-term

Allocated Resources. (See Summary Table following Goal 5: VIII)

Extension and Outreach Programs Underway: See Summary for Goal 5, I-VIII)

Goal 5: II. AFFORDABLE HOUSING AND HOUSING AND COMMUNITY ISSUES

Statement of Issue(s):

- * Need for quality affordable housing and increase in home ownership rates are important issues for public and private sector housing educators, developers and agencies in the nation, as well as in the state of Missouri. Education plays an essential role in expanding homeownership and home retention opportunities for Missouri citizens, particularly low to moderate-income families.
- * A central focus of Outreach and Extension programming in housing is to implement educational programs that address the issues of affordable homeownership, post home purchase maintenance and financial planning and community participatory process to foster housing development. These programs provide an opportunity to examine potential and existing barriers facing Missouri households and build capacity within the communities which in turn helps to improve quality of life of Missouri citizens through home ownership, home retention, housing development and community revitalization.
- * More than thirty Missouri counties included affordable housing related programming in their plan of work. There are three ongoing programs and one program under development that address affordable housing issues in this state. These are: *HomeWorks: Maintaining Your Housing Investment*, *Healthy Indoor Air for America's Homes*, *Home Ownership Made Easier* and *Affordable Housing Development through Community Partnership*. Teams of extension specialists and agency partners are implementing and evaluating the ongoing programs in different regions of the state.

Performance Goals and Indicators:

Output indicator:

- * Thirty extension specialists have been trained to offer the ongoing programs. Ten additional specialists will be trained to teach new program under development.
- * Certified trainers of all affordable housing related programs will reach 500 participants with these programs.

Outcome indicator:

- * Of these 500 participants, 250 will adopt at least one recommended practice related to affordable home ownership or home maintenance or home development.

Key Program Components:

- * *Home Ownership Made Easier* – A one day workshop on financial and environmental factors related to the home buying process is implemented by a team of trainers working with local partners and participants.
- * *HomeWorks* – One or two day workshops are implemented by a team of trainers with local partners and participants. These workshops are customized from a core curriculum containing thirteen modules on home maintenance and financial management.

- * Healthy Indoor Air for America's Homes –Extension specialists depending on community participant needs implement one or multiple session workshops. The core curriculum contains twelve modules.
- * Affordable Housing Through Community Partnership – Multiple sessions of community meetings and workshops will be conducted with each community participating in the program to develop community capacity and enhance community participatory process towards affordable housing development. Extension specialists will coordinate this process with developers, builders, and local agency and government partners and community citizens.

Internal and external linkages:

- * Home Ownership Made Easier – This program draws upon the expertise from Consumer Family Economics, Environmental Design specialists in extension as well from agency partners from USDA Rural Development, US Department of Housing and Urban Development and Consumer Credit Counseling Services.
- * HomeWorks - This program draws upon the expertise of extension specialist in Environmental Design Consumer and Family Economics, Agricultural Engineering and Community Development, along with expertise from local home inspectors, community action agencies, lenders and builders.
- * Healthy Indoor Air for America's Homes – This program draws upon the expertise of extension specialists in Environmental Design, Community Development and Agricultural Engineering.
- * Affordable Housing through Community Partnership – This program will draw upon the expertise of Environmental Design, Consumer and Family Economics and Community Development Specialists, as well as local stakeholders.

Target Audience:

- * First time homebuyers, renters, homeowners interested in home maintenance and retention issues, communities interested in affordable housing development.

Program Duration:

Home Ownership Made Easier – Long term

HomeWorks – Long term

Healthy Indoor Air for America's Homes – Short term

Affordable Housing Development through Community Partnership – Long term

Allocated Resources:

Home Ownership Made Easier 15%

HomeWorks 40%

Healthy Indoor Air 15%

Afford. Housing Through Community Partnership 30%

(See Summary following Goal 5, VIII)

Extension and Outreach Programs Underway: See Summary for Goal 5, I-VIII

GOAL 5: III. FAMILY FINANCIAL MANAGEMENT

Statement of Issue(s):

- * Over the past several years the United States economy has shown continued growth, unemployment rates have fallen, and the number of families receiving welfare has decreased.

- * Despite these economic improvements, many individuals and families face continued economic challenges. Household debt levels have increased faster than income over the past six years. Personal bankruptcies reached an all-time high in 1998 at almost 1.4 million filings. This increase correlates closely with the increased debt load carried by American families. The personal savings rate has continued to fall. Currently, people spend \$9.99 of every \$10.00 they earn. The Retirement Confidence Survey reports that only half of all workers have even tried to determine how much they need to save for retirement. These and other economic challenges are exacerbated by the lack of financial skills of adults and youth. This leads to poor consumer and financial decision making.
- * Recent deliberative groups and county extension councils identified several key issues to be addressed. These include basic financial management skills and consumer education. Thirty-one counties identified these issues. Sixty program efforts were identified in county plans of work.

Performance Goals and Indicators:

Goals/Objectives

- * 1000 individuals and/or families will increase their financial management skills through participation in financial management education programs.

Output Indicators

- * One thousand people will attend family financial programs.
- * Eighty percent of participants who show increased knowledge of financial management concepts after participating in financial management programs as indicated on pre and post learning surveys
- * Sixty percent of participants who plan to adopt one or more new financial management practices
- * Fifteen different agencies and organizations collaborating on financial management programs

Outcome Indicators

- * Thirty percent of participants of financial management programs who adopt one or more recommended financial management practices.

Key Program Components:

- * Family financial management programs – educational programs teaching basic financial management concepts and skills, credit management, basic savings and investing, and consumer decision making.
- * Women's financial management program (WFIP) – 7-week workshop series teaching mid-life and older women basic financial management skills.
- * Money action plan (MAP) – program designed to train helping professionals working with clients having financial problems. it currently includes information on the basics of money management, budgeting, record keeping, credit and communication.

Internal and External Linkages:

- * The WFIP program includes collaborative efforts with AARP and other agencies and organizations working with mid-life and older adult women.
- * The MAP program includes collaborations with social service agencies and organizations that work with clients having financial problems.

Target Audiences:

- * Individuals and families.

- * Mid-life and older adult women.
- * Social service agency and organization personnel working with clients having financial problems.

Program Duration:

- * These program efforts will continue for five years.

Allocated Resources:

Financial Management Programs – 40%

WFIP – 25%

MAP – 35%

(See Summary following Goal 5, VIII)

Extension and Outreach Programs Underway: See Summary for Goal 5, I-VIII

CHILD CARE PROGRAM

Statement of the Issue(s):

- * Currently, the state of MO does not require childcare workers to obtain training and education prior to caring for children. Research demonstrates that childcare provider education and preparation are the best indicators of the quality of care children receive. During the recent MO Program of Work planning process, 44 counties reported that child care provider education and training was a program priority. Toward that end, the UO/E childcare program will develop a research-based educational program for newly hired, undereducated childcare workers and train staff from statewide childcare provider training organizations to implement the program. The ultimate goal is to insure statewide access to the educational program.

Performance Goals and Indicators:

Output Indicators

- * One statewide, research-based preservice curriculum will be developed.
- * Twenty UO/E regional staff will be trained to train 120 other agency/organization's staff to conduct the curriculum.
- * Three thousand five hundred newly hired, undereducated child care provider will complete the preservice training program.

Outcome Indicators

- * Twenty percent of those trained with the preservice curriculum will exhibit positive behavior changes associated with the program.

Key Program Components:

- * Preservice curriculum designed
- * Preservice curriculum pilot-tested
- * Preservice curriculum evaluated
- * UO/E staff trained to train other child care provider trainers
- * Program is accessible to child care workers statewide

Internal and External Linkages:

- * The program has been made possible through a contract between the University of Missouri and the Missouri Department of Health. As progress is made, additional linkages will be forged between UO/E and statewide child care provider training organizations (Missouri Departments of Social Services, Elementary and Secondary Education, Health, and Mental Health).

Target Audience(s):

- * MO child care provider-training organizations and newly hired, undereducated child care workers.

Program Duration:

- * 3 years total, starting in August, 1999

Allocated Resources: (See Summary following Goal 5, VIII): See Summary for Goal 5, I-VIII

Goal 5: IV. COMMUNITY DEVELOPMENT**Statement of Issue(s):**

- More than 40 percent of the counties indicated priority for programming to deal with citizenship education, community leadership development, local governance, and local government in the public deliberation process conducted in 1999.
- Missouri's Latino population grew significantly during the 1990's, from 61,702 in 1990 to 118,592 in 2000. This represents an increase of 92.2 % while the total population for Missouri only increased 9.3%.
- Since 1995, Missouri has provided basic training for community development to USDA-Rural Development, extension faculty, and a host of state and local agencies and organizations in response to demands for professional development voiced through various venues, including the Missouri Community Development Society.
- State, federal, and foundation grant applications are requiring communities to develop and present plans as a requisite for funding. At the same time, pressures are increasing for citizen involvement in planning for communities.
- The devolution of authority and responsibility from the federal to more local levels of government has provided challenges and opportunities to local governments at the same time that most face issues of greater complexity with increasing pressures to use limited resources wisely.
- Since the severity of the 1993 flooding of the Missouri and Mississippi Rivers, University Outreach and Extension has served on the Governor's Disaster Recovery Partnership with "responsibility to provide the Partnership with research-based disaster management, preparedness, technical and recovery information."

Performance Goals and Indicators:*Output Indicators:*

- * Number of trainings provided by the Community Development Academy to University Outreach and Extension faculty and others
- * Number of training events offered for conduct of public policy deliberation, the number of policy issues addressed on a regional and on statewide basis
- * Number of training and educational events provided to broaden multicultural awareness
- * Number of leadership development programs conducted and number of participants
- * Number of community interagency disaster organizations formed, formation of website, and number of trainings conducted.
- * Number of communities that develop community plans.
- * Number of communities and local governments, which engage citizens to learn about and to make informed decisions.

Outcome Indicators:

- * Communities and University Outreach and Extension will have more effective communication and cultural diversity skills resulting in more programming for Latino population.
- * University Outreach and Extension will be successful in assuring that public policy issues and education is addressed through its system and statewide.
- * Communities and groups within communities work together more effectively to create viable communities.
- * Communities, businesses and farms, schools, homes are prepared for disaster.
- * Community leaders improve their skills and involve themselves in community work to improve the viability of their communities.
- * Middle school students learn about their community and local government and contribute to the governance and vitality of the local community.

Key Program Components:

- * Building Inclusive Communities
Alianzas will enhance the ability of communities to collaborate with the growing immigrant Latino populations through a Latino, university, and community partnership utilizing the community-based co-learner approach.
 The *Community Development Academy* (CDA) will provide a conceptual base and skills for professionals to successfully bring people together to deal with common community-based issues and give purposeful direction to their futures. The Academy represents integration of teaching and extension and multi-state outreach.
- * Community and Economic Planning will engage citizens and residents in participatory action planning, implementation and monitoring of their own progress. Curricula used include but are not limited to Vision to Action: Take Charge Too and the Business Retention and Expansion Visitation Program.
- * Community Decision Making
Building Community Through Public Deliberation will foster civic engagement and engenders the capacity for community dialogue around real and contemporary issues such as race and ethnicity, land use, and drug and alcohol abuse.
The Local Government CECH-Up Program will teach middle school students about local government and involves them in issues confronting local leaders and the citizens of their communities.
Community Decision Support will provide research, outreach, tools and training that validates improved policy decision in Missouri communities.
- * Community Based Infrastructure
 The Community Emergency Management Program will facilitate disaster mitigation, preparedness, response and recovery at the community level.
- * Community Leadership Development
Experience in Community Enterprise and Leadership (EXCEL) will increase the capacity of local leaders to mobilize the human, social, physical, financial, and environmental capital within their communities to address community issues.

Internal and External Linkages:

- * Internally, community development programs will link with University of Missouri-Columbia Social Sciences Unit, Department of Rural Sociology, and Water Quality Program in College of Agriculture, Food and Natural Resources; Conference Office; MU Direct; and Fire and Rescue Training Institute.

- * Community development programs also involve other campuses, including Lincoln University; University of Missouri-Kansas City Institute for Human Development; University of Missouri-Rolla; University of Missouri-St. Louis Public Policy Research Center, College of Education, and Public Administration Program; and the Office of Social and Economic Data Analysis of University Outreach and Extension.
- * Externally, community development programs will link with USDA-Rural Development, the Federal Emergency Management Agency, the Missouri State Emergency Management Agency, the Governor's Disaster Recovery Partnership, the Missouri Department of Health, the Missouri Department of Economic Development, local governments and councils of government, the Kettering Foundation, the North Central Regional Center for Rural Development, Michigan State University, Oklahoma State University, University of Wisconsin, and others.

Target Audience:

- * Hispanics and Latinos; formal, informal and aspiring community leaders; community development professionals and paraprofessionals in urban, suburban and rural areas; local government officials; citizens; government and non-profit organizations in local communities.

Program Duration:

Programs are anticipated for continuation dependent upon review every three to five years.

Allocated Resources:

- * Building Inclusive Communities – 13.8%
 - * Community and Economic Planning - 7.7%
 - * Community Decision Making and Government – 44.3%
 - * Community Based Infrastructure – 13.8%
 - * Community Leadership Development – 6.9%
 - * Other (i.e., contributions to water quality, housing, etc.) – 13.5%
- (See Summary following Goal 5, VIII)

Education and Outreach Programs Underway: See Summary for Goal 5, I-VIII

Goal 5: V. BUILDING STRONG FAMILIES:

Statement of Issue(s):

- * More than fifty Missouri counties specifically included “building strong families” in their plans of work. Nearly every county in Missouri included topics directly related to family strengths. The Building Strong Families for Missouri program is being implemented statewide and evaluated by a team of 40 extension specialists. A statewide training of agency trainers is planned for March 2000.

Performance Goals and Indicators:

Output indicator:

- * One hundred agency trainers will be certified to offer Building Strong Families.
- * Certified Building Strong families trainers will reach 750 participants with the program.

Outcome indicator:

- * Of those 750, at least 500 participants will adopt at least one recommended practice for strengthening their family.

Key Program Components:

- * A seven-session program is designed by a trainer working with local partners or participants to customize the program from a core curriculum containing the following modules: Identifying Strengths, Communicating, Managing Stress, Child Self-Care, Food & Fitness, Working, Setting Goals, Parenting, Spending, Balancing Work & Family, Alert Consumer, Healthy House, and Self-Esteem.

Internal and External Linkages:

- * The program draws upon expertise from human development and family studies, food science and human nutrition, consumer and family economics, environmental design, and addiction technology transfer from the University of Missouri's Columbia and Kansas City campuses and from counties in every Missouri region.

Target Audiences: Working parents with dependents.

Program Duration: Long-term.

Allocated Resources: (See Summary following Goal 5, VIII)

Extension and Outreach Programs Underway: See Summary for Goal 5, I-VIII

Goal 5: VI. PARENT EDUCATION PROGRAMS

Statement of Issue(s):

- * The diversity in composition and structure of families in Missouri creates unique parenting needs. These needs range from general information on basic parenting skills to specific information on coping with divorce, single parenting and anger management. In deliberative group discussions, the need for parenting information was identified as a high priority in 52 counties. In county plans of work, parenting programs were listed 88 times.

Goals and Indicators:

- * Parents will be reached with general information through the media and with specific information through targeted programs. It is expected that there will be 2,500 parents each year who will receive parenting information and participate in programs from University Outreach and Extension in Missouri.

Output Indicator

- * Seventy percent of those individuals will adopt at least one new parenting practice, as a result of extension programming.

Key Program Components:

- * Programs will include three major parent education efforts in Missouri which are: Programs for Parents (general curriculum); Focus On Kids (divorcing parents); and RETHINK (anger management for parents).

Internal and External Linkages:

- * Program cooperators include the court system, local departments of family services, 4-H Youth Development and Lincoln University (through MO-CYF).

Target Audiences:

- * The target audiences include parents and divorcing parents with children under the age of 18, single parents and stepparents.

Program Duration:

Programs for Parents (general curriculum) short-term
 RETHINK (anger management for parents) short-term
 Focus On Kids (divorcing parents, court mandated program) long-term

Allocated Resources:

Programs for Parents - 30%

RETHINK - 20%

Focus On Kids - 50%

(See Summary following Goal 5, VIII)

Extension and Outreach Programs Underway: See Summary for Goal 5, I-VIII

Goal 5: VII. FAMILY STRENGTHS (ADOLESCENTS AT RISK)**Statement of Issue(s):** (*Teen Pregnancy*)

- * A review of the deliberative group process results revealed that 17 counties identified teen pregnancy as a need. In addition, 10 counties have identified teen pregnancy in their plans of work.
- * A review of the deliberative group process results revealed that 16 counties identified family and child abuse/neglect/violence as a need. In addition, 7 counties have identified family and child abuse/neglect/violence in their plans of work.
- * A review of the deliberative group process results revealed that 7 counties identified both teen pregnancy and family and child abuse/neglect/violence as needs.

Performance Goals and Indicators:*Output Indicators*

- * At the end of the reporting period, State and Regional Extension staff will train 100 school personnel on two teen pregnancy prevention curricula that have been identified by the Centers for Disease Control as having the strongest evidence of effectiveness. In turn, these school personnel will implement the curricula with 1000 students.
- * At the end of the reporting period, 10 communities in Missouri will establish mentoring programs for pregnant and parenting teens and sustain those programs for at least two years, thereby reaching 150 teens.
- * At the end of the reporting period, State and Regional Extension staff will train 200 citizens on the MAPP program related to maltreatment and adolescent pregnancy and parenting and 10 communities will establish coalitions to address issues around maltreatment and adolescent pregnancy and parenting.

Outcome Indicators

- * Twenty percent of adolescents participating in educational programs will adopt at least one recommended practice or make at least one healthy life decision as a result of the program effort.

Key Program Components:

- * *Adolescent Pregnancy Prevention*--Contract with the Missouri Department of Elementary and Secondary Education to support the "Programs That Work" effort in the Missouri public schools. This effort involves training school personnel to implement two teen pregnancy prevention curricula that have been identified by the Centers For Disease Control as having the strongest evidence of effectiveness in delaying the initiation of sexual activity, increasing the use of protection or decreasing the number of sexual partners.
- * *Mentoring Pregnant and Parenting Teens*--Provide resources, training and technical assistance to community-based coalitions to establish Missouri Volunteer Resource Mothers (MVRM) programs. Missouri Volunteer Resource Mothers is a mentoring

program for pregnant and parenting teens in which they are paired with community volunteers who provide information, support and resources for approximately three hours per week until the young mother is one year postpartum. MVRM has been shown to reduce child abuse potential, decrease parenting stress, and improve the health of the infant.

- * Violence Prevention--Provide training and materials to community groups to implement MAPPP (Maltreatment and Adolescent Pregnancy and Parenting Program). The MAPPP training manual and video challenges community members to address abuse prior to, during and after an adolescent pregnancy. It has been estimated that 60% of pregnant teens were sexually abused before the age of eleven. In addition, many pregnant and parenting adolescents are simultaneously abused at home and by partners. In addition, children of teen parents are at increased risk for child abuse and neglect.

Internal and External Linkages:

- * Internally, CASPP will link with campus-based faculty in Columbia, St. Louis and Kansas City to carry out the three major program efforts identified above. These linkages will involve faculty from Nursing, Social Work, and Law.
- * Externally, CASPP will link with the Missouri Department of Elementary and Secondary Education, the Missouri Department of Social Services, and the Missouri Department of Health. Regional staff will link with a wide variety of community agencies, such as Parents as Teachers, CHART, and Community 2,000 teams.

Target Audiences:

- * There are three target audiences for the three major program efforts: Regional Extension Staff who serve as the link between CASPP efforts and local communities, local community-based coalitions, and pregnant and parenting teens.

Program Duration:

- * All three programmatic efforts (pregnancy prevention, mentoring pregnant and parenting teens, and violence prevention) will exist for at least an additional five years.

Allocation of Resources:

Adolescent Pregnancy Prevention-----20%

Mentoring Pregnant and Parenting Teens--50%

Violence Prevention--30%

(See Summary following Goal 5, VIII)

Extension and Outreach Programs Underway: See Summary for Goal 5, I-VIII

Goal 5: VIII. OLDER ADULTS AND THEIR FAMILIES

Statement of Issue(s):

- * The context for the UMKC Center on Aging Studies' role in working with UM Outreach/Extension is the rapidly increasing population of elders in Missouri (which has 750,000 persons over age 65 and ranks 7th nationally in proportion of population over age 65). With the aging of the "baby boom" generation the proportion of persons over age 65 in the U.S. will increase from 13% in 2000 to 17% in 2020 and 20% in 2030. The most rapidly growing segment of the elder population is the oldest-old, or those over age 85. Nearly every sector of life is significantly influenced by these trends, and it is important for Extension professionals to have resources readily available to meet the needs of older adults and their families in their communities.

- * As the result of county needs assessments and deliberations of the Elderly Base Program Planning Team, two primary foci guide our current programs and plans:
 - a) Needs of frail elders and their families for information on caregiving and dependent care; caregiving also includes older adults as caregivers to developmentally disabled adult children and to grandchildren (where the parent is absent)
 - b) Positive models for social roles in later life, or “successful aging,” which recognizes the potential for older adults to continue to be contributing and productive members of their communities.

Performance goals and indicators:

- * Our program efforts will result in the following outputs and outcomes:

Outputs

- * Comprehensive web site on care giving and on successful aging
- * Short-term educational opportunities for Extension field faculty by interactive television and Program Implementation Experiences (P.I.E.s)
- * Longer-term credit opportunities for professional improvement
- * Tend Positive models/programs for successful aging in communities
- * One thousand persons will receive current information on caregiving in an easily accessible and usable format
- * Fifteen Extension field faculty in using technology to access current information and develop community programs in aging

Outcomes

- * Forty percent of the 1,000 persons reached through programming for older adults and their families will adopt at least one recommended practice.

Major Efforts in the program:

- * The programs in the aging area will continue to build on efforts of the past several years and will consist of the following:
 - ♣ Using technology to convey new information and resources on aging (especially family caregiving and positive social roles/successful aging) to Extension professionals and lay persons – particularly the Center on Aging Studies Without Walls web site and a daily on-line news bulletin of new development and research findings
 - ♣ Working directly with Extension field faculty through Program Implementation Experiences and interactive television programs to learn how to access new information and translate it into community programs
 - ♣ Working toward making formal credit education available to Extension field faculty in a web-based format

Internal and External linkages:

- * Gerontology and aging studies is inherently interdisciplinary. The UMKC Center on Aging Studies is positioned to draw on a wide variety of faculty resources in academic units across the campus (e.g., sociology, psychology, pharmacy, medicine, dentistry, nursing, public administration, music therapy, social work, counseling) and on other campuses of the UM system. Aging topics can impact a range of Extension disciplines (e.g., agriculture, business, community development, human development/families), and aging resources will be directed toward these areas as appropriate. The Center on Aging Studies also is positioned to work with and integrate resources from a number of

governmental agencies (e.g., Missouri Division on Aging) and professional associations in aging.

Target Audience(s):

- * The “customers” for programs of the Center on Aging Studies ultimately are older adults and their families in communities all over Missouri, but we work primarily by providing resources and training to Extension field staff and other community professionals--who in turn interface with these citizens and translate our resources into formats that apply in their local areas.

Program Duration:

- * The program is ongoing and long-term since there is a steady flow of new information to transmit and build into local programming efforts.

Allocated resources for Goal 5, Programs I-VIII:

Goal 5 Program, I-VIII	Year	FTEs	Dollars
Missouri Youth and Families at Issue, Affordable Housing, Family Financial Mgt., Child Care, Community Development, Building Strong Families, Parent Education, Family Strengths, and Older Adults	2000	40	\$2,639,600
	2001	40	\$2,639,600
	2002	40	\$2,639,600
	2003	40	\$2,639,600
	2004	40	\$2,639,600

Extension and Outreach Programs Underway:

- * All of University Outreach and Extension’s field staff are “regional” specialists who have multi-county assignments. A majority of the programming implemented in Missouri would be conducted on a multi-county basis. During FY96-99 educational programs were available in all of the areas included in the FY00-04 plan of work. The research based programs included the following:
 - ♣ Educational Programs for Parents and Their Children
 - ♣ Building Better Child Care for Missouri: A Six Session Program for Directors
 - ♣ Family Financial Management
 - ♣ Affordable Housing
 - ♣ Community Development
 - ♣ Building Strong Families
 - ♣ Elderly Issues: Center on Aging without Walls
 - ♣ Poverty at Issue
- * Results of these programs are summarized in the FY98 Annual Report submitted to CSREES.

Goal 5: IX. 4-H YOUTH DEVELOPMENT

Statement of Issue(s): (*Building Character through Community Service Learning*)

- * The need for character education for youth was identified through citizen input in 43 Missouri counties. Additionally, 30 counties identified the need for youth leadership development and 19 counties called for citizenship education. Repeatedly, plans developed by county advisory groups call for programs that help young people develop the traits of responsibility, fairness, citizenship, trustworthiness, respect and caring. In Missouri, the Character Counts! Program and community service learning are two 4-H youth/Extension initiatives that are addressing these issues.

Performance Goals and Indicators:

Output Indicators:

- * 1,500 youth will enroll in Show-Me Character Education programs (A13)
- * 200 classrooms will enroll in Show-Me Character Education Programs (S13)
- * 175 4-H clubs will enroll in 4-H Community Service activity (A12)
- * 175 4-H clubs will submit community service logs
- * 5,000 youth and adults will participate in 4-H community service learning activities
- * 800 community service learning activities will be completed by 4-H clubs
- * 35 4-H clubs will secure Missouri 4-H Foundation Community Service grants

Outcome Indicators:

- * As a result of community service learning and character education programs, 4-H volunteers and youth will report that youth are more responsible and are viewed by the community as valued, contributing members.
- * 4-H clubs will generate \$20,000 in matching community funds and in-kind services for 4-H community service grants

Key Program Components:

- * Show Me Character is Missouri 4-H's character education initiative, partnering with the National CHARACTER COUNTS! Coalition. The program emphasizes six pillars of character—caring, citizenship, fairness, responsibility, respect, and trustworthiness. Missouri 4-H staff will provide training, materials and technical assistance for parents, youth, volunteers, educators, childcare providers and community groups. The six pillars will be integrated into 4-H newsletters, camps, fairs, judging classes and other traditional 4-H programs. Collaboration with local school districts, parks and recreation departments, juvenile justice centers, U.S. Army bases and other community groups will expand the outreach.
- * Educational programs will stress the importance of citizenship, caring and sharing through service to the community. Each 4-H club will be asked to voluntarily report community service activities completed throughout the year. They will record the number of young people and adults involved in service as well as the types of service provided. A recognition certificate will be presented to clubs that meet criteria. The Missouri 4-H Foundation will provide a grant incentive program that encourages 4-H clubs to plan and implement community service learning projects. Each project requires a match of community resources.

Internal and External linkages:

- * Through national events such as the creation of the Corporation for National Service, Thousand Points of Light Foundation and the Presidents' Summit on America's Future there has been a renewed emphasis on service. These events, coupled with the 4-H national ad campaign, "Are You Into It, have re-focused 4-H members on community

service learning. The National 4-H Base Program Strategic Team identified community service learning as one four “programs of excellence” in its 1998 report. Missouri 4-H will partner with many initiatives, including the CHARACTER COUNTS! Coalition, the Missouri School Board Association, Girl Scouts, Boy Scouts, and PREP.

Target Audiences:

- * Youth, parents, community members

Program Duration:

- * Long-term

Allocated Resources:

- * Character Education – 70%; community service learning 30%

Extension and Outreach Programs Underway: See Summary for Goal 5, IX

SCHOOL-AGE CARE AND OPPORTUNITIES FOR YOUTH DURING OUT-OF-SCHOOL HOURS

Statement of Issues(s):

- * Child care in the broadest sense—serving infants through early teens in a wide range of settings—has been approved by the Extension Committee on Policy (ECOP) as a new national initiative for the Cooperative Extension System. The need for supervised care and positive activities for youth during non-school hours was validated through citizen input in numerous Missouri counties. Specifically, 22 counties identified the need for youth activities and 8 counties called for latchkey or after school programs. Additionally, 11 counties identified the need for community/youth centers, 9 for recreational facilities, 8 for increased educational opportunities for persons of all ages and 3 for recreation opportunities for youth. More than 30 counties pointed to the need for improved access to child care. Studies show that high-quality infant and school-age care are the most difficult to secure. The plans developed by county advisory groups call for programs that provide young people and their families with safe, supervised and educationally-enriching programs and services that are available year-round during non-school hours.

Performance Goals and Indicators:

Output Indicators:

- * 1,300 youth enrolled in 4-H Adventure Clubs or 4-H supported School Age Child Care (SACC) programs
- * 60 SACC programs assisted in 35 communities
- * 500 SACC providers trained
- * A library of SACC resources available from CES across the nation will be assembled.
- * 20 new after-school computer labs started

Outcome Indicators:

- * As a result of SACC provider training, 250 will adopt recommended practices
- * Of the 20 new after-school computer labs started with 4-H support, 15 will be sustained by the community after grant funding ends.
- * As a result of technical assistance by 4-H faculty, \$10,000 will be secured in grants by local SACC programs.

Key Program Components:

- * The National 4-H Base Program Strategic Team identified school-age care as one four “programs of excellence” in its 1998 report. 4-H Youth Development staff will facilitate training sessions for school-age child care (SACC) providers throughout Missouri and the

nation on a number of topics such as developmentally appropriate practice, accreditation, SACC credential process, child care resources, guidance and discipline, program development, character education, parent involvement and computer technology. In addition, Missouri 4-H faculty will assemble a library of CES resources for SACC programs that can be checked out by persons from across the nation. Missouri 4-H faculty will also continue to assist local school districts in securing funding to implement SACC programs.

- * The program is to establish after-school computer labs for middle school youth will continue. The project meets the needs of at-risk youth by providing a safe, engaging and recreational setting during the after school hours. A partnership with the state Department of Elementary and Secondary Education and local school districts makes the program possible. Special efforts will be made to develop computer labs in school districts and communities with underserved audiences including minorities, low-income youth, and youth for whom English is a second language.

Internal and External linkages:

- * Missouri 4-H will partner with the National Network for Child Care, the National School Age Care Alliance, the Missouri School Age Care Alliance, Missouri Child Care Accreditation, and the Missouri Department of Elementary and Secondary Education.

Target Audiences:

- * Youth, parents, school personnel, communities

Program Duration:

- * Long-term

Allocated Resources:

- * SACC training, resources, technical assistance-80%
- * After-school computer labs – 20%

Extension and Outreach Programs Underway: See Summary for Goal 5, IX

SCIENCE AND TECHNOLOGY EDUCATION

Statement of Issue(s):

- * The Secretary of Labor's SCANS report identified working with technology as one of five essential competencies that workers will need for the future. The need for science and technology education was validated through citizen input in numerous Missouri counties. In the area of science education, 23 counties identified the need for water quality and environmental education and 15 counties called for 4-H school enrichment programs. The need for technology education was expressed as the need for workforce preparation for youth in 21 counties and for programs on the increased use of information technology in 24 counties. In Missouri, the following programs are addressing science and environmental education needs: Streets to Streams, Hatching Chicks and Observation Earth. Technology education for youth includes several workforce preparation initiatives, as well as 4-H computer projects and related programs.

Performance Goals and Indicators:

Output Indicators:

- * 85,000 youth and volunteers will enroll in 4-H school enrichment and group programs Observation Earth (S97), Hatching Chicks (S15), Streets to Streams (A66)
- * 20 after-school computer labs will be established

- * 1,100 youth and 250 volunteers will enroll in 4-H computer projects (890, 891, 894)
- * The national 4-H computer curriculum for the Cooperative Curriculum Service will be completed and piloted.

Outcome Indicators:

- * Of the 20 new after-school computer labs started with 4-H support, the community will sustain 15 after grant funding ends.
- * Of the 1,100 youth enrolled in 4-H computer projects, 65% will complete the project and adopt new practices as a result of the program.

Key Program Components:

- * 4-H Youth Development programs reach youths and adults who enroll as volunteers in 4-H youth development programs through 4-H clubs, 4-H School enrichment and 4-H special interest groups. They receive support from 4-H and Extension staff in the form of printed materials, training, seminars, conferences, and on-line information. Statewide 4-H enrollments, county ES-237 reports are used to determine the number of persons completing non-formal programs in these areas.
- * The program to establish after-school computer labs for middle school youth will continue. The project meets the needs of at-risk youth by providing a safe, engaging and recreational setting during the after school hours. A partnership with the state Department of Elementary and Secondary Education and local school districts makes the program possible.

Internal and External linkages:

- * Missouri 4-H will partner with the Missouri Department of Elementary and Secondary Education, UOE Water Quality Programs and the National Network for Science and Technology.

Target Audiences:

- * Youth, parents, school personnel, communities

Program Duration:

- * Long-term

Allocated Resources::

- * Science and environmental education- 75%
- * Technology education—25%

Extension and Outreach Programs Underway: See Summary for Goal 5, IX

VOLUNTEER LEADERSHIP DEVELOPMENT

Statement of Issue(s):

- * The National 4-H Base Program Strategic Team identified volunteer leadership development as one four “programs of excellence” in its 1998 report. The need for volunteer leadership development was identified through citizen input in 34 Missouri counties. Additionally, 8 counties identified the need for coalitions to support youth and 30 called for youth leadership development.

Performance Goals:

Output Indicators:

- * 15,000 youth and adults will volunteer with 4-H programs
- * 200 persons will access and use part or all of the on-line volunteer training course
- * 1,500 4-H club members will be surveyed for the Missouri 4-H impact study

- * 114 counties will receive a resource packet on working with Latino audiences.

Outcome Indicators:

- * 90,000 hours of volunteer time valued at \$12 per hour will be donated.
- * 50% of the persons accessing the on-line volunteer training course will correctly answer self-study questions on positive youth development.
- * 75% of the youth surveyed for the 4-H impact study will report that the adults in 4-H respect them and provide them with safe environments.
- * 75% of the youth surveyed for the 4-H impact study will report that 4-H provides them with opportunities to be leaders, to volunteer and to help others.
- * The number of Latino/Latina volunteers working in Missouri 4-H will increase by 100% in four years.

Key Program Components:

- * 4-H Youth Development programs reach youths and adults who enroll as volunteers in 4-H youth development programs. Volunteers will be enrolled and receive support from 4-H and Extension staff in the form printed materials, training, seminars, conferences, on-line information and recognition. State-level volunteer training include Shootings Sports volunteer certification, the North Central Regional 4-H Leaders Forum and the Missouri 4-H Leaders Forum. A new, on-line self-study course for volunteers who work with youth will be introduced.
- * Modeling after the national 4-H Impact Assessment Project, Missouri will conduct its own impact assessment in 2000. A survey will be administered to 1,900 youth in 4-H clubs. The survey will provide data on the youth's perception of the adults who work with them in 4-H. It will also collect data from the youth on how they feel about volunteering.
- * Initiatives to recruit, retain and support volunteers from the Latino community will include the development of resource materials, special training for faculty and staff, and partnerships with other human service agencies and groups.

Internal and External linkages:

- * Missouri 4-H will partner with the Missouri 4-H Foundation and private funders, the North Central states' 4-H programs, National 4-H Council and CSREES.

Target Audiences:

- * Youth, parents, school personnel, communities

Program Duration:

- * Long-term

Allocated Resources:

- * Volunteer recruitment, enrollment, support and recognition—60%
- * Volunteer training—20%
- * Volunteer self-study course—10%
- * Impact study—10%

Allocated Resources for Goal 5, IX – 4-H Youth Development:

Goal 5 Program	Year	FTEs	Dollars
4-H Youth Development: Building Character School Age Child Care Science & Technology Volunteer Leadership	2000	46	\$3,035,540
	2001	46	\$3,035,540
	2002	46	\$3,035,540
	2003	46	\$3,035,540
	2004	46	\$3,035,540

Extension and Outreach Programs Underway:

- * All of University Outreach and Extension's field staff are "regional" specialists who have multi-county assignments. A majority of the programming implemented in Missouri would be conducted on a multi-county basis. During FY96-99 educational programs were available in all of the areas included in the FY00-04 plan of work. The research based programs in 4-H Youth Development included the following:
 - ♣ Character Counts
 - ♣ School Age Child Care
 - ♣ Environmental Stewardship
 - ♣ Family and Parenting
 - ♣ Health Education
 - ♣ Leadership Development (Youth and Adult)
 - ♣ Workforce Preparedness
- * Results of these educational programs are summarized in the FY98 Annual Report submitted to CSREES.

Goal 5 Anticipated Impact:

The overriding goal of all education programming related to the Enhancing Economic Opportunity and Quality of Life for Americans areas is to cause adoption by Missouri citizens of recommended practices. In the Family Strengths program area, in which more than 10,000 citizens will participate, this kind of impact is expected on 10-70% of persons participating, depending upon the specific program; 75-90% will gain knowledge and skills; and 20-80% will intend to adopt recommended practices.