

2008 Texas A&M University Combined Research and Extension Plan of Work

I. Plan Overview

1. Brief Summary about Plan Of Work

Texas is the second largest state in the nation with approximately 22.8 million citizens. The size and scope of Texas poses unique challenges with a wide range of diversity including both the agricultural and human sectors. The issues and needs of Texans vary by numerous factors and in many cases are complex. Texas is one of the most rural and urban states in the nation with a majority of its citizens living in 20 of the 254 counties in the state. The Texas Agricultural Experiment Station (TAES) and Texas Cooperative Extension (TCE) are the land-grant research and outreach agencies of the Texas A&M University System. Both agencies are members of Texas A&M Agriculture and headquartered in College Station, Texas. Since its beginning in 1876 as a land grant institution, Texas A&M University has been a recognized leader in agriculture, food, and natural resources. Today, Texas A&M Agriculture continues this legacy through outstanding academic programs, important contributions to science through research and discovery, and life-long learning and youth development through Extension and outreach programs. The work of both TAES and TCE is guided by strategic plans and roadmaps. The Science Roadmap, developed by TAES, is designed to enable TAES to focus its resources on issues of highest importance as identified by agency scientist and other stakeholders. The goals of the Science Roadmap are vital and equally important to ensuring a positive future for Texas and its citizens. The goals of the Science Roadmap include: 1) Sustain healthy ecosystems and conserve our natural resources. 2) Enhance competitiveness and prosperity of urban and rural agricultural industries. 3) Improve public health and well-being.

The Extension Roadmap, developed by TCE, is designed to enable the dissemination of research-based information to the citizens of Texas on issues of importance as identified through grassroots and other stakeholder input processes. This information is intended to allow the citizens of Texas to make sound decisions that will improve the overall quality of life for themselves and all Texans. The goals of the Extension Roadmap are: 1) Ensure a sustainable, profitable, and competitive food and fiber system in Texas. 2) Enhance natural resource conservation and management. 3) Build local capacity for economic development in Texas communities. 4) Improve the health, nutrition, safety, and economic security of Texas families. 5) Prepare Texas youth to be productive, positive, and equipped with life skills for the future. 6) Expand access to Extension education and knowledge resources. Both the Science Roadmap and the Extension Roadmap can be found at <http://agprogram.tamu.edu/roadmaps.cfm>.

Work on issues of importance in the state is a joint endeavor by both TAES and TCE. Research-based information is translated to practical best management practices and disseminated via multiple channels including the network of agents in all 254 counties in the state. Identification of issues and needs is conducted at multiple levels by both TAES and TCE. Grassroots involvement by citizens, advisory groups, and commodity and industry groups are just a few of the ways this information is generated. Work with other states on areas of shared interest is also of high priority. This Plan of Work addresses programs of primary importance in Texas. The programs selected also address federal initiatives for agriculture and natural resources, individuals and families, communities, and youth and adult leadership development.

Estimated Number of Professional FTEs/SYs total in the State.

Year	Extension		Research	
	1862	1890	1862	1890
2008	412.7	0.0	228.1	0.0
2009	412.7	0.0	228.1	0.0
2010	412.7	0.0	228.1	0.0
2011	412.7	0.0	228.1	0.0
2012	412.7	0.0	228.1	0.0

II. Merit Review Process

1. The Merit Review Process that will be Employed during the 5-Year POW Cycle

- Internal University Panel

2. Brief Explanation

TAES and TCE Administrative Leaders serve as merit reviewers for the Federal Plan of Work, the Federal Report of Accomplishments and Results, and associated grants and contracts. This team is comprised of senior administrative staff, as well as department heads and associate department heads for Extension. This leadership team is responsible for the oversight and management of all programs conducted by research and Extension faculty.

III. Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

As mentioned in the overview, both TAES and TCE have strategic plans and roadmaps that serve as a guide to the development and implementation of programs that address critical issues. Stakeholder involvement was central to the development of these documents and stakeholder input will continue to guide the use of these documents over the next several years.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

All programs and activities of TAES and TCE are open to all people without regard to race, color, sex, disability, religion, age, or national origin. The programs listed in this plan of work address issues of importance to all Texans and are open to all citizens. In some cases, programs are specifically targeted to under-served or under-represented populations with identified needs. A specific example of a program in this category is the Food Stamp Nutrition Education program, called Better Living for Texans (BLT) which addresses food insecurity through education about economical food buying. Other examples of programs that may be of particular interest include diabetes education, cancer prevention, and parenting education programs. In other cases, programs are designed to address a certain subject and are applicable to all clientele.

3. How will the planned programs describe the expected outcomes and impacts?

Each planned program listed in this plan or work has identified output and outcome measures. Each program listed also strives to attain results as they relate to social, environmental, and economic impacts.

4. How will the planned programs result in improved program effectiveness and/or efficiency?

TAES and TCE efforts to provide effective and efficient programs based on the needs of the citizens of Texas are well documented. Both agencies believe in and welcome accountability standards, and readily provide information to various stakeholders as requested.

IV. Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation

- Targeted invitation to non-traditional stakeholder groups
- Survey specifically with non-traditional groups
- Targeted invitation to traditional stakeholder groups
- Targeted invitation to non-traditional stakeholder individuals
- Use of media to announce public meetings and listening sessions
- Survey of traditional stakeholder groups
- Targeted invitation to traditional stakeholder individuals

Brief explanation.

Both Texas Cooperative Extension (TCE) and the Texas Agricultural Experiment Station (TAES) use multiple methods to reach stakeholder groups within the State of Texas. TCE uses multiple sources of input from various stakeholders. These include local clientele, commodity/special interest groups, trend data monitored by specialists, various county committees, elected officials, and emerging issues. Teams of Extension and research faculty meet to analyze these issues which leads to prioritization and development of programs to address the needs and issues raised by the various stakeholder groups and methods.

In 2007 and as part of TCE's strategic planning effort, local Leadership Advisory Boards (LABs) will begin to validate issues raised in the local stakeholder input process on an annual basis. Leadership Advisory Boards serve as a conduit to local citizens and

their needs. These boards are comprised of community opinion leaders charged with providing long term visioning and advocacy for the local Extension program. Approximately 2,500 individuals serve on Leadership Advisory Boards across the state. In addition, another 10,000 citizens serve on program area committees, task forces, coalitions, and youth boards. These volunteers represent specific areas of the local program and are involved in issues identification, program development and delivery, evaluation and interpretation of programs, and management of other volunteers. These volunteers represent all 254 counties in the state.

The TAES Administration, Department Heads, and Resident Directors regularly meet with the major agricultural industries and commodity groups in Texas. TAES has encouraged the public to participate in helping set priorities, assess current program and process effectiveness, and determine future directions. These processes were open, fair, and accessible to encourage individuals, groups, and organizations to have a voice, and treated all with dignity and respect. Stakeholders were initially identified by membership in listed organizations, though all events were public and were announced in the press and other written notice. Input from these events was captured by TAES participants, and in some cases was published for further public use. Stakeholder input has always been critical to TAES processes and programs, and listed events and organizations continue as essential partners in setting the TAES agenda and recognizing and addressing emerging issues. A concentrated effort was done for small grains, corn, sorghum, and cotton resulting in a jointly developed strategic plan.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Advisory Committees
- Other (Meetings with various stakeholder groups)
- Open Listening Sessions
- Needs Assessments
- Use Surveys

Brief explanation.

The basis for TAES and TCE's relevance in the State of Texas is grassroots involvement. TCE has utilized Open Listening Sessions as part of the grassroots Texas Community Futures (TCFF) Process in the past. These sessions provide local clientele the opportunity to voice their opinion on issues of importance to their lives and the lives of others in their community. The TCFF process was first implemented in 1999 and again implemented in 2004. In 2007 and as part of TCE's strategic planning effort, local Leadership Advisory Boards (LABs) will begin to validate issues raised in the local stakeholder input process on an annual basis. Leadership Advisory Boards serve as a conduit to local citizens and their needs. These boards are comprised of community opinion leaders charged with providing long term visioning and advocacy for the local Extension program. Approximately 2,500 individuals serve on Leadership Advisory Boards across the state. In addition, another 10,000 citizens serve on program area committees, task forces, coalitions, and youth boards. These volunteers represent specific areas of the local program and are involved in issues identification, program development and delivery, evaluation and interpretation of programs, and management of other volunteers. These volunteers represent all 254 counties in the state. Information from other stakeholders is obtained in various ways. Regular meetings are held with various commodity and interest groups. These groups provide input into programmatic decisions including development of new efforts, modification of existing efforts, and termination of programs that are no longer relevant. Finally, various subject matter groups employ the use of surveys and other needs assessment processes to gain information specifically about their subject area. Data from these processes are used to develop programs to address issues. TAES has incorporated data from the TCE process, as well as other stakeholder input methods, for development of initiatives and programs.

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Other (Modified Nominal Group Process)
- Survey of traditional Stakeholder groups
- Meeting with traditional Stakeholder groups
- Meeting with traditional Stakeholder individuals
- Survey of traditional Stakeholder individuals
- Survey specifically with non-traditional groups
- Meeting with the general public (open meeting advertised to all)

Brief explanation

TCE and TAES use various stakeholder assessment processes, and individuals may or may not participate in multiple sessions. The methods used to identify participants have been discussed in a previous section. Methods to collect data are varied. Ongoing and scheduled meetings with various stakeholder groups are held to obtain input on issues and the direction of programs. These groups include but are not limited to commodity, health, family service, community, and youth organizations within Texas. Surveys or other needs assessment processes may be used to gain input from these groups. The same process is true for various stakeholder individuals. Faculty responsible for programming and subject matter areas are expected to maintain relationships with individuals who represent groups of importance to TCE. These individuals help guide or confirm the direction of educational programming in the state.

3. A statement of how the input will be considered

- To Set Priorities
- Redirect Research Programs
- In the Action Plans
- Other (Create strategic plans)
- In the Budget Process
- Redirect Extension Programs
- To Identify Emerging Issues
- In the Staff Hiring Process

Brief explanation.

Both TAES and TCE use data from the various stakeholder input processes to direct programming efforts at the local, district, regional, and state level. During the summer of 2004, Data Summits were held across the state to review information collected from the various stakeholder input processes. County, district, and state faculty participated in these meetings, each bringing an important perspective to the process. As a result of the Data Summits, action plans and evaluation strategies were developed to address priority issues. These plans were developed for use at the local, regional, and/or state level depending on the scope of the issue. These actions plans are currently being used by faculty to develop specific educational programs to address these issues. Results of the Data Summits, as well as local data collected during the TCFF process, is available at <http://futuresforum.tamu.edu>. In the Summer of 2007, Regional Teams will meet to analyze current and emerging issues raised from various stakeholders. Information from these meetings will lead to the refinement of current programs and the development of new programs to address high priority issues. In addition, strategic plans and roadmaps for TAES and TCE have been developed to guide our efforts. We are currently completing Year 01 of this plan and preparing for Year 02. Priority areas of this plan have been used to guide the efforts of this POW. Both the Science Roadmap and the Extension Roadmap can be found at <http://agprogram.tamu.edu/roadmaps.cfm>.

V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Cancer Risk Reduction and Early Detection
2	Character Education
3	Child Passenger Safety
4	Community Resource and Economic Development
5	Crop and Forage Production Systems
6	Diabetes Education
7	Economics and Management
8	Exercise and Wellness
9	Food and Nutrition Education for Limited Resource Audiences
10	Food Safety
11	Leadership and Volunteer Development
12	Life Skills for Youth
13	Livestock and Meat Quality, Safety, and Productivity
14	Out of School Time
15	Parenting and Dependent Care
16	Range Management
17	Water Management

V(A). Planned Program (Summary)

1. Name of the Planned Program

Cancer Risk Reduction and Early Detection

2. Brief summary about Planned Program

This program supports agent activities providing cancer risk reduction and early detection education throughout Texas, particularly for underserved groups living in rural areas as well as research programs which target the development of diagnostic tools for the early detection of cancer. The Cancer Risk Reduction and Early Education program supports the TCE Extension Roadmap goal to improve the health, nutrition, safety, and economic security of Texas families and the TAES Science Roadmap goal of improving public health and well-being.

3. Program existence : Intermediate (One to five years)

4. Program duration : Medium Term (One to five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 723 100% Hazards to Human Health and Safety

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Cancer is the second leading cause of death in Texas and the United States. A higher proportion of cancers diagnosed in rural Texans are diagnosed at an invasive state rather than at more treatable stages. African Americans have the highest rates of mortality for lung, breast, prostate, colon, and cervical cancers. Up to two-thirds of cancer cases can be prevented if behavioral changes are made. Early detection education is another important way to reduce the impact of cancer. Helping children develop healthy habits is an important part of the battle to reduce the impact and burden of cancer.

2. Scope of the Program

- In-State Extension
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Awareness education and activities can lead to improved behaviors such as not beginning tobacco use, reduced sun exposure, and seeking timely cancer screening.

2. Ultimate goal(s) of this Program

Reduce the incidence and impact of cancer in Texas.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	3.4	0.0	0.7	0.0
2009	3.4	0.0	0.7	0.0
2010	3.4	0.0	0.7	0.0
2011	3.4	0.0	0.7	0.0
2012	3.4	0.0	0.7	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

County Extension educators are provided an annual opportunity to apply for funding that will allow them to purchase educational resources such as pedometers to increase the number of children walking in Title One schools, ultraviolet beads and other materials to detect sun exposure at Farm Safety Days, health fairs, and similar activities, exhibits such as the one for Put It Outside to be used at health and parenting fairs, Hallelujah to Health exhibits and other materials for use in African American churches, Towards No Tobacco curriculum and workbooks, etc.

Research will be conducted to develop reliable new technologies for the early detection of cancer.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Demonstrations ● Education Class 	<ul style="list-style-type: none"> ● Public Service Announcement ● TV Media Programs

3. Description of targeted audience

Under-served rural residents of Texans who are at risk for cancer.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	2240	3890	3180	0
2009	2240	3890	3180	0
2010	2240	3890	3180	0
2011	2240	3890	3180	0
2012	2240	3890	3180	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :1 2009 :0 2010 : 1 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	10	0
2009	10	0
2010	10	0
2011	10	0
2012	10	0

V(H). State Defined Outputs

1. Output Target

- # of education sessions conducted.

2008 :194 2009 :194 2010 : 194 2011 :194 2012 :194

- # research-related projects.

2008 :4 2009 :4 2010 : 4 2011 :4 2012 :4

V(I). State Defined Outcome

1. Outcome Target

of kids who intend to not use tobacco based on signing a 'No Tobacco' contract.

2. Outcome Type : Change in Action Outcome Measure

2008 :700 2009 : 700 2010 : 700 2011 :700 2012 : 700

3. Associated Knowledge Area(s)

- 723 - Hazards to Human Health and Safety

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Public priorities
- Appropriations changes

Description

The continuation of the Extension program in Cancer Risk Reduction and Early Detection Education is dependent on funding from the Texas Cancer Council.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- Whole population
- Other (Web-Based Surveys)

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Character Education

2. Brief summary about Planned Program

This program focuses on educational program of character education for children and youth, ages 4-19, and for parents and other adults who are their role models. The Character Education program supports the TCE Extension Roadmap goal to prepare Texas youth to be productive, positive, and equipped with life skills for the future.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 806 100% Youth Development

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Texas counties identified youth issues of character, ethics, morals, education, and job preparation as high priority concerns. Character education encourages the creation of environments that foster ethical, responsible, and caring young people. It is the intentional, proactive effort to instill in youth, the important core, ethical values of the nationally recognized "Six Pillars of Character" (Trustworthiness, Citizenship, Caring, Fairness, Responsibility, and Respect for self and others) from the Josephson Character Counts Institute. Effective good character education is comprehensive; it is integrated into all aspects of life.

2. Scope of the Program

- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

To be effective, character education must include the entire community and must be infused throughout the entire school curriculum, and culture. Texans Building Character will be an on-going commitment of resources. Texas youth and families will understand and develop the "Six Pillars of Character." Texas Cooperative Extension faculty will be able to teach and support character education in youth and family programs. Texas communities, schools, and families will become safer, more productive places to live.

2. Ultimate goal(s) of this Program

Character Education will become an integral part of all TCE youth and family education. All newly developed Extension materials will include character education. Enhance character education for Texas 4-H and FFA youth. Ensure all 4-H and FFA livestock projects meet all food quality standards. Promote a positive image of youth livestock programs. Impact and improve the behavior of Texas children and youth through character education. Reach youth ages 4-19: in schools, 4-H clubs, youth programs, sports, livestock shows, extracurricular activities, and the workplace.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	13.6	0.0	0.0	0.0
2009	13.6	0.0	0.0	0.0
2010	13.6	0.0	0.0	0.0
2011	13.6	0.0	0.0	0.0
2012	13.6	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Extension agents will form coalitions of community organizations to deliver character education to young people and adults and will train other adults as teachers for a variety of community groups and organizations as well. Character education will be delivered through the 4-H program, public and private schools and school-based clubs, juvenile courts and probation, activities directed to at-risk youth, sports programs, youth livestock activities and job skills and workforce training.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Group Discussion ● Education Class ● Workshop 	<ul style="list-style-type: none"> ● Public Service Announcement ● Newsletters ● Web sites

3. Description of targeted audience

County Extension Agents, Ag Science teachers, youth 4-19, volunteer leaders, parents, schools, community education and service organizations.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	8950	85000	17000	0
2009	8950	85000	17000	0
2010	8950	85000	17000	0
2011	8950	85000	17000	0
2012	8950	85000	17000	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :2050 2009 :2050 2010 :2050 2011 :2050 2012 :2050

V(I). State Defined Outcome

1. Outcome Target

% of youth who report abilities (skills) changed as a result of participation in character education programs.

2. Outcome Type : Change in Action Outcome Measure

2008 :20 2009 : 20 2010 : 20 2011 :20 2012 : 20

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

% of youth who plan to adopt character paractices as a result of participation in character education programs.

2. Outcome Type : Change in Action Outcome Measure

2008 :10 2009 : 10 2010 : 10 2011 :10 2012 : 10

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

of youth who report an increased knowledge of character education principles.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Public priorities
- Appropriations changes
- Competing Programatic Challenges
- Public Policy changes

Description

Character education programs are a high priority for Texas Cooperative Extension. Factors which could affect the implementation of these efforts include changes in monies appropriated to Texas Extension for work in character education or other youth programs, competing priorities with the publics who make up our target audiences, and other programmatic efforts that emerge as higher priorities during a given span. In as much that the factors identified above could be negative to the effectiveness of the program, some could also enhance efforts. Primarily appropriation changes (in the form of increased funding for character education or youth programs), and/or public policy changes could serve in this role.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- Observation
- On-Site
- Mail
- Sampling
- Other (Web-Based Surveys)

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Child Passenger Safety

2. Brief summary about Planned Program

The Child Passenger Safety Program works to reduce deaths and injuries from motor vehicle crashes by increasing the proper use of child restraints and safety belts. The project's emphasis is increasing the use of child safety seats across Texas. The Child Passenger Safety program supports the TCE Extension Roadmap goal to improve the health, nutrition, safety, and economic security of Texas families.

3. Program existence : Intermediate (One to five years)

4. Program duration : Medium Term (One to five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 723 100% Hazards to Human Health and Safety

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Traffic crashes are the leading cause of death for children ages 3 and up. Although safety belts and child restraints are the single-most effective tool in reducing these deaths and injuries, nationally more than half of children killed in vehicle crashes are unrestrained. Minority children are at a greater risk of being unrestrained. Studies show that 73 percent of child safety seats are used incorrectly. To date, this project has inspected over 6,600 child safety seats, seeing a misuse rate of 99 percent.

2. Scope of the Program

- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Proper use of child restraints reduces the risk of fatal injury in motor vehicle crashes.

2. Ultimate goal(s) of this Program

Reduce deaths and injuries to children in motor vehicle crashes.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	3.9	0.0	0.0	0.0
2009	3.9	0.0	0.0	0.0
2010	3.9	0.0	0.0	0.0
2011	3.9	0.0	0.0	0.0
2012	3.9	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

County Extension agents and law enforcement officers trained and certified as child passenger safety technicians will conduct child safety seat checkup events in under-served rural areas of Texas. In addition, child safety seat fitting stations have been established at county Extension offices and fire/EMS departments to allow families additional access to certified technicians. When needed, a replacement seat is issued at no charge to parents and caregivers at checkup events and fitting stations.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Demonstrations ● One-on-One Intervention 	<ul style="list-style-type: none"> ● Public Service Announcement ● TV Media Programs

3. Description of targeted audience

Under-served residents of rural areas in Texas.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	1440	21300	1620	0
2009	1440	21300	1620	0
2010	1440	21300	1620	0
2011	1440	21300	1620	0
2012	1440	21300	1620	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 : 0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of group education sessions conducted.

2008 :200 2009 :200 2010 : 200 2011 :200 2012 :200

V(I). State Defined Outcome

1. Outcome Target

of car seats inspected.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :900 2009 : 900 2010 : 900 2011 :900 2012 : 900

3. Associated Knowledge Area(s)

- 723 - Hazards to Human Health and Safety

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Competing Public priorities
- Government Regulations
- Economy
- Public Policy changes
- Natural Disasters (drought,weather extremes,etc.)

Description

Any of the above factors could increase or decrease the output numbers identified. This is a project funded by the Texas Department of Transportation and without continued funding, the project could not continue, for example.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Description

The number of child safety seats properly installed at the beginning of the checkup event or when coming to a fitting station will be used to determine the percentage of seats being used properly by participating families.

2. Data Collection Methods

- Observation
- Whole population

Description

The number of families attending checkup events or coming to fitting stations, and those using child safety restraints improperly are tracked. The number of seats dispensed will also be tracked.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Community Resource and Economic Development

2. Brief summary about Planned Program

Community and economic development were identified by stakeholder input during both the 1999 and 2004 Texas Community Futures Forum as issues of great importance to the State of Texas. Specific issues include concerns about individual, community and regional economic viability and maintenance of a high quality of life.

Programs are basically designed to increase the capacity of targeted Texans to respond to rapidly changing socio-economic forces that affect their community economy and quality of life through increasing understanding of these forces and potential responses. Specific programs targeted at engendering and fostering home-based and micro-enterprises, support for identification and realization of entrepreneurial opportunities in agriculture, forest and other natural resource industries; development of tourism and recreational opportunities for local economic benefit; community-based planning and community leadership training. Target audiences for the program consist of residents, elected and appointed officials, leaders and potential leaders, existing and potential business owner/managers in and around the over 1200 communities in all 254 counties of the state.

The Community Resource and Economic Development program supports the TCE Extension Roadmap goal to build local capacity for economic development in Texas communities.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 608 80% Community Resource Planning and Development
- 803 20% Sociological and Technological Change Affecting Individuals, Families and Communities

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Local economies and populations are rapidly changing. These changes are driven largely by changes in the broader society and economy to include agricultural and other national policy developments, international trade and other global economic conditions as well as the dynamic situation in regions and the state. Local leaders, producers and other businesses need greater knowledge to address these changes positively ensuring the continued economic and social viability of their communities. Stakeholder input provided by over 10,000 Texans in all 254 counties of the state through the Texas Community Futures Forum indicate that issues associated with development of their communities are pervasive and a very high priority. Specific issues include concerns about individual, community and regional economic viability and maintenance of a high quality of life.

2. Scope of the Program

- Multistate Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

(1) Residents and leaders desire to positively affect their community's situation. (2) Research-based knowledge relevant to development that is timely, understandable and usable can be conveyed to Texas communities. (3) Communities can mobilize local resources in coordination and collaboration with external regional and state resources to affect community change.

2. Ultimate goal(s) of this Program

(1) Texas communities gain knowledge supporting design and implementation of successful development strategies. (2) Landowner/managers and communities will effectively access natural, cultural, and heritage resources for developing local business and economies. (3) Present and potential community leaders will increase knowledge and abilities needed to effectively

guide and direct constituent and integrated organizations in achieving desired community goals development.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	31.1	0.0	0.0	0.0
2009	31.1	0.0	0.0	0.0
2010	31.1	0.0	0.0	0.0
2011	31.1	0.0	0.0	0.0
2012	31.1	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Provide training and program materials to County Extension Agents to conduct educational programs at the county level. Provide multi-county, regional and statewide educational programs via specialist faculty to stakeholders. Coordinate and collaborate with state and federal agencies in rural development activities as well as regional rural development centers.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● One-on-One Intervention ● Workshop ● Demonstrations ● Education Class 	<ul style="list-style-type: none"> ● Web sites ● TV Media Programs ● Newsletters

3. Description of targeted audience

Target audiences for the program consist of residents, elected and appointed officials, leaders and potential leaders, existing and potential business owner/managers in and around the over 1200 communities in all 254 counties of the state.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	26750	98100	2350	0
2009	26750	98100	2350	0
2010	26750	98100	2350	0
2011	26750	98100	2350	0
2012	26750	98100	2350	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :1900 2009 :1900 2010 :1900 2011 :1900 2012 :1900

V(I). State Defined Outcome

1. Outcome Target

Percent of targeted counties conducting economic development related educational programs.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :25 2009 : 50 2010 : 50 2011 :50 2012 : 50

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

1. Outcome Target

Land owner/managers in selected counties serve as demonstrations of natural resource-based economic development educational programs.

2. Outcome Type : Change in Action Outcome Measure

2008 :12 2009 : 12 2010 : 12 2011 :12 2012 : 12

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

1. Outcome Target

Participants of educational programs increasing knowledge of community leadership principles.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 608 - Community Resource Planning and Development
- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Populations changes (immigration,new cultural groupings,etc.)
- Natural Disasters (drought,weather extremes,etc.)
- Competing Public priorities
- Public Policy changes
- Competing Programatic Challenges
- Appropriations changes
- Government Regulations

Description

Communities, their residents and economies are substantially influenced by external factors in today's interrelated socio-economic situation. Factors are not only domestic but global in scope.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- On-Site
- Whole population
- Other (Web-Based Surveys)
- Sampling

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Crop and Forage Production Systems

2. Brief summary about Planned Program

The Crops and Forage Production program focuses on crop genetic improvement and the development of production systems to minimize crop inputs, and maintain sustainable agricultural production systems. Specifically, in Texas, the crops most targeted are cotton, wheat, sorghum, corn, rice, soybeans, peanuts, and forages. Interdisciplinary work is conducted with entomology, plant pathology, agricultural engineering, and soil and crops sciences.

The Crop and Forage Production Systems program supports the TAES Science Roadmap goal for enhancing competitiveness and prosperity of urban and rural agricultural industries, and the TCE Extension Roadmap goal of ensuring a sustainable, profitable, and competitive food and fiber system in Texas.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 102 10% Soil, Plant, Water, Nutrient Relationships
- 202 10% Plant Genetic Resources
- 205 20% Plant Management Systems
- 211 10% Insects, Mites, and Other Arthropods Affecting Plants
- 212 10% Pathogens and Nematodes Affecting Plants
- 213 10% Weeds Affecting Plants
- 216 30% Integrated Pest Management Systems

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Environmental stresses, crop pests and global market forces make profitable and sustainable production of crops and forages a continuing challenge. It is through understanding and adoption of new technologies that improve productivity, profitability and global competitiveness of crop and forage production systems that Texas farmers and ranchers will enhance their competitive position to other producers around the world. The target audience includes farmers and ranchers who produce field crops and forage in Texas. Research and outreach educational programs through Texas Cooperative Extension and the Texas Agricultural Experiment Station have had significant impacts on the production and economic success of growers in Texas. It is expected that these same impacts as well as those for emerging issues will continue. Through local, regional and statewide programs, Texas producers are the recipients of timely, sound and objective information to enhance their production success.

2. Scope of the Program

- Multistate Integrated Research and Extension
- Multistate Research
- Integrated Research and Extension
- In-State Extension
- Multistate Extension
- In-State Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Food, fiber, and forage production will remain key economic industries in the State of Texas. These industries contribute in

excess of 7 billion dollars annually to the Texas economy, as well as supporting the state's livestock industry (see program on livestock). Producers have and will continue to need access to emerging technologies to remain profitable and sustainable. National demand for alternative energy resources places Texas agricultural producers in a position to supply alternative fuel resources needed for the state. This industry will require intensive research and education programs to switch from conventional production systems to systems which are fuel efficient and have net energy gains.

2. Ultimate goal(s) of this Program

The goal of the Crop and Forage Production Program is to meet the needs of Texas producers by providing the research and educational programs needed to remain profitable and sustainable.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	66.1	0.0	80.0	0.0
2009	66.1	0.0	80.0	0.0
2010	66.1	0.0	80.0	0.0
2011	66.1	0.0	80.0	0.0
2012	66.1	0.0	80.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Provide training and program materials to County Extension Agents to conduct educational programs at the county level. Technical assistance is provided to agents by specialists in the area of result demonstrations and applied research. Provide multi-county, regional and statewide educational programs via specialist faculty to various stakeholders. Coordinate and collaborate with state and federal agencies in crop and forage activities.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Group Discussion ● Workshop ● Other 1 (Field Days) ● Education Class ● One-on-One Intervention ● Demonstrations 	<ul style="list-style-type: none"> ● TV Media Programs ● Web sites ● Newsletters

3. Description of targeted audience

The target audience for this program consists of agricultural producers who produce food, fiber, and forages in the state. Specific focus is on those commodities listed in the program overview. In addition, these programs are interpreted to the urban public through various methods.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	51000	182900	0	0
2009	51000	182900	0	0
2010	51000	182900	0	0
2011	51000	182900	0	0
2012	51000	182900	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :5 2009 :5 2010 : 5 2011 :5 2012 :5

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	785	0
2009	785	0
2010	785	0
2011	785	0
2012	785	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :1900 2009 :1900 2010 : 1900 2011 :1900 2012 :1900

- # of research-related projects.

2008 :175 2009 :175 2010 : 175 2011 :175 2012 :175

V(I). State Defined Outcome

1. Outcome Target

% of crop and forage producers that adopt or plan to adopt best management practices to improved quality and profitability.

2. Outcome Type : Change in Action Outcome Measure

2008 :25 2009 : 25 2010 : 25 2011 :25 2012 : 25

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 202 - Plant Genetic Resources
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems

1. Outcome Target

% of crop and forage producers that report increased knowledge of best management practices to improve quality and profitability.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 102 - Soil, Plant, Water, Nutrient Relationships
- 202 - Plant Genetic Resources
- 205 - Plant Management Systems
- 211 - Insects, Mites, and Other Arthropods Affecting Plants
- 212 - Pathogens and Nematodes Affecting Plants
- 213 - Weeds Affecting Plants
- 216 - Integrated Pest Management Systems

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Populations changes (immigration,new cultural groupings,etc.)
- Appropriations changes
- Competing Programatic Challenges
- Public Policy changes
- Competing Public priorities
- Government Regulations
- Natural Disasters (drought,weather extremes,etc.)

Description

Crop and forage production in Texas has been influenced by natural disasters such as hurricanes, floods, drought and wildfires. Production costs and incentives for production, management and use are influenced by economic changes. Higher fuel prices, fertilizer prices, equipment costs, and fees associated with technology in genetically modified crops are all factors. Public policy changes and government regulations challenge educators to provide up-to-date, neutral information that helps producers make economically viable decisions. Population shifts and use of available land for productive and meaningful crop and forage production bring opportunities and challenges to producers/users and the associations/corporations/groups that make up this diverse industry.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- Sampling
- Other (Web-Based Surveys)
- On-Site
- Whole population
- Mail
- Observation

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Diabetes Education

2. Brief summary about Planned Program

Diabetes education programs are highlighted by the Do Well, Be Well with Diabetes program. Do Well, Be Well with Diabetes is a program covering six nutrition and six self-care management topics. This program helps people with diabetes learn the skills needed to manage their disease successfully.

Diabetes research is conducted by the Center for Obesity Research and Program Evaluation and targets foods and food ingredients which contribute to a reduced risk of obesity and obesity linked diseases such as diabetes. The Diabetes Education program supports the Science Roadmap goal of improving public health and well-being and the Extension Roadmap goal of improving the health, nutrition, safety, and economic security of Texas families.

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 724 100% Healthy Lifestyle

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The number of Americans with diabetes is projected to increase 43 percent, growing from 12.1 million to 17.4 million by 2020. Just over 4 percent of the population has diagnosed diabetes, but almost \$1 of every \$5 spent on health care is for people with diabetes. Currently, only 7 percent of people with diabetes are at recommended levels for blood glucose, blood pressure, and blood cholesterol. Poor management increases health care costs. People with diabetes who maintain their blood glucose, blood pressure, and cholesterol numbers within recommended ranges can keep their costs, health risks, quality of life, and productivity very close to those without the disease.

2. Scope of the Program

- In-State Research
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Research has shown that people with diabetes can learn effective self-care skills for their type 2 diabetes in group settings with teaching delivered by volunteer health care professionals using a curriculum such as Do Well, Be Well with Diabetes.

2. Ultimate goal(s) of this Program

People attending at least 5 of the 6 class sessions will show significant improvement in their before meals blood glucose measures.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	17.7	0.0	1.2	0.0
2009	17.7	0.0	1.2	0.0
2010	17.7	0.0	1.2	0.0
2011	17.7	0.0	1.2	0.0
2012	17.7	0.0	1.2	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Partner with local health care professionals to provide a six class series of self-care education classes using the Do Well, Be Well with Diabetes curriculum.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Group Discussion ● Demonstrations ● Education Class ● Other 1 (Class handouts) 	<ul style="list-style-type: none"> ● TV Media Programs ● Public Service Announcement ● Newsletters ● Web sites

3. Description of targeted audience

The target audience is all people with type 2 diabetes who need training to learn self-care management skills such as limiting carbohydrate intake, increasing physical activity, taking prescribed medications, checking their blood glucose levels, and regularly visiting their health care providers.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	12700	41250	0	0
2009	12700	41250	0	0
2010	12700	41250	0	0
2011	12700	41250	0	0
2012	12700	41250	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 : 0 2011 :1 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	5	0
2009	5	0
2010	5	0
2011	5	0
2012	5	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :1125 2009 :1125 2010 : 1125 2011 :1125 2012 :1125

- # of research-related projects.

2008 :1 2009 :1 2010 :2 2011 :2 2012 :1

V(I). State Defined Outcome

1. Outcome Target

of participants who report improved before meals blood glucose levels after attending 5 of the six classes.

2. Outcome Type : Change in Action Outcome Measure

2008 :1000 2009 : 1000 2010 : 1000 2011 :1000 2012 : 1000

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Programatic Challenges
- Government Regulations
- Competing Public priorities
- Economy
- Appropriations changes
- Public Policy changes
- Natural Disasters (drought,weather extremes,etc.)

Description

Any of the above factors could influence whether a class attendee improves their management of type 2 diabetes. For example, if Medicare or Medicaid improved reimbursement for private or group instruction by health professionals, our class participants might choose that option over our classes. Also, if there were better reimbursement for more and better medicines or care by skilled health care professionals such as endocrinologists, certified diabetes educators, dietitians, or pharmacists, people might choose these options instead of our classes or even show greater improvement in blood glucose management when attending our

classes. If the economy worsens, people might not be able to afford adequate medicines or supplies such as blood glucose strips.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Description

Participants are given a pre test at the beginning of the class series and post test at the end of the six classes to determine changes in measures such as blood glucose and practices such as seeing a health care specializing in eye care to test for signs of retinopathy or making better food selections.

2. Data Collection Methods

- Whole population
- On-Site

Description

Participants are given a pre test at the beginning of the class series and a post test at the end of the six classes to determine changes in measures such as blood glucose and practices such as seeing a health care specializing in eye care to test for signs of retinopathy or making better food selections. This data is entered on line and analyzed immediately for use by Extension educators in reports. The Internal Review Board of Texas A&M has approved all data collection procedures.

V(A). Planned Program (Summary)**1. Name of the Planned Program**

Economics and Management

2. Brief summary about Planned Program

The focus of the Economics and Management program is to provide research-based information to clientele to minimize risk inherent in the food and fiber system in Texas. In response to these needs, TAES and TCE have coordinated the development and delivery of multifaceted programs in policy analysis, risk assessment, risk management, and in-depth management/marketing education. In the past, policy, management, and marketing changes were evaluated based on average results. Research, applied-research, and educational programs are focused on: (1) intensive education in group settings; (2) use of master volunteers and county Extension personnel to expand extension and research communication; and (3) one-to-one assistance in financial and risk management.

The Economics and Management program supports the TAES Science Roadmap goal for enhancing competitiveness and prosperity of urban and rural agricultural industries, and the TCE Extension Roadmap goal of ensuring a sustainable, profitable, and competitive food and fiber system in Texas.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

- 602 25% Business Management, Finance, and Taxation
- 604 25% Marketing and Distribution Practices
- 605 10% Natural Resource and Environmental Economics
- 606 10% International Trade and Development
- 608 10% Community Resource Planning and Development
- 610 20% Domestic Policy Analysis

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Risk is inherent at all levels of the food and fiber system. For the Texas food and fiber system to become more competitive, profitable, and sustainable (in light of changing agricultural and trade policies and highly volatile commodity and input prices), farmers, ranchers, and organizations—plus the communities that are dependent upon agriculture—must be better able to weigh the risks and projected impacts of alternative decisions on profitability and competitiveness. Managing the increased price and income risk is key to the future economic success of production agriculture and agribusiness firms in Texas. As economic stress intensifies, risk management—knowing the probabilities associated with what to do and what not to do—becomes even more important to the long term goal of a profitable and sustainable agriculture. In response to the described need, TAES and TCE will coordinate the development and delivery of multi-faceted programs in policy analysis, risk assessment, risk management, and in-depth management/marketing education. In the past, policy, management, and marketing changes were evaluated based on average results. But, in Texas, averages do not tell the story—the risk of upside and downside swings also must be evaluated for long-term survivability. Educational and applied research programs are focused on: (1) intensive education in group settings; (2) use of master volunteers and county Extension personnel to expand extension and research communication; and (3) one-to-one assistance in financial and risk management.

2. Scope of the Program

- Integrated Research and Extension
- In-State Research
- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Assumptions include: 1) continued funding to maintain the critical mass of the Agricultural Economics Extension and Research faculty and staff, and that the retiring faculty will be replaced with top quality new faculty from Universities across the U.S. and from other countries; 2) audiences will be targeted and provided with the science based training and applied research results in the areas of management, marketing, policy, international trade, community and resource economics that they need to improve their knowledge level in these subject areas to enhance their ability to remain economically viable, competitive, and profitable; 3) program focus and training methods will continue to evolve based on evaluation results and research findings.

2. Ultimate goal(s) of this Program

Texas producers, agribusiness and other business professionals, and landowners will become more knowledgeable of the approaches to assess and manage the risk and rewards in agricultural, natural resources, and other community based business operations.

Texas producers, agribusiness and other business professionals, and landowners will make informed decisions based on sound science based information that will enhance their ability to remain economically viable, competitive, and profitable.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	21.9	0.0	14.0	0.0
2009	21.9	0.0	14.0	0.0
2010	21.9	0.0	14.0	0.0
2011	21.9	0.0	14.0	0.0
2012	21.9	0.0	14.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Numerous activities, events and experiences will be conducted to address the needs of producers and other clientele in the area of economics and management. These include but are not limited to workshops, one-on-one intervention, marketing clubs, cooperatives, popular press articles, extension publications, and other methods as needed. These educational approaches focus on the identified needs of those who participate in our programs. Work of the Texas Agricultural Experiment Station and Texas Cooperative Extension is conducted jointly where research-based information is generated and then transferred to clientele. This work is conducted primarily on campus with dissemination efforts both on campus and at various research and extension centers across the state. Collaborative efforts are also an important part of this area. Work with various commodity groups and other agencies are routinely conducted by both TAES and TCE faculty. Examples of this work include the grain sorghum producers on policy work and the Texas Agricultural Statistics Service on the 2004 Texas Custom Rates Statistics.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Other 1 (Applied Research) ● Group Discussion ● Workshop ● One-on-One Intervention 	<ul style="list-style-type: none"> ● TV Media Programs ● Newsletters ● Web sites ● Other 1 (Popular Press Articles)

● Education Class	● Public Service Announcement
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3. Description of targeted audience

The target audience for the economics and management program includes all Texas producers. Specifically, commercially viable agricultural producers are targeted, but additional efforts are targeted to small scale operators, part-time producers, new/young landowners/producers, and commodity groups. The target audiences are very diverse in knowledge, skills, attitudes, and aspirations to learn and adopt important strategies to be successful. Therefore, the methods used in this area vary depending on which audience is being addressed.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	26500	43000	0	0
2009	26500	43000	0	0
2010	26500	43000	0	0
2011	26500	43000	0	0
2012	26500	43000	0	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :1 2010 :0 2011 :1 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	130	0
2009	130	0
2010	130	0
2011	130	0
2012	130	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :1110 2009 :1110 2010 : 1110 2011 :1110 2012 :1110

- # of research-related projects.

2008 :45 2009 :45 2010 : 45 2011 :45 2012 :45

V(I). State Defined Outcome

1. Outcome Target

Percent of producers that report a savings in money or increased profit by best management practices adopted.

2. Outcome Type : Change in Condition Outcome Measure

2008 :35 2009 : 35 2010 : 35 2011 :35 2012 : 35

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices
- 605 - Natural Resource and Environmental Economics
- 608 - Community Resource Planning and Development

1. Outcome Target

% of target audience that reports an increased knowledge of economics and management strategies.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices
- 605 - Natural Resource and Environmental Economics

1. Outcome Target

Number of producers who conduct whole farm or ranch risk assessment evaluations.

2. Outcome Type : Change in Action Outcome Measure

2008 :100 2009 : 100 2010 : 100 2011 :100 2012 : 100

3. Associated Knowledge Area(s)

- 602 - Business Management, Finance, and Taxation
- 604 - Marketing and Distribution Practices

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Government Regulations
- Economy
- Public Policy changes
- Appropriations changes
- Natural Disasters (drought,weather extremes,etc.)
- Competing Programatic Challenges

Description

All of the factors listed above could have a potential impact on the outcomes of this program. Negative effects are likely to be caused from any of the factors listed. Changes in appropriations, public policy, and government regulations could have either a negative or positive effect on the program. Part of the evaluation efforts of this program will include monitoring for the potential effect of these factors and determining the extent to which they do affect the program.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- Whole population
- Telephone
- Mail
- Other (Web-Based Surveys)
- Sampling

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)**1. Name of the Planned Program**

Exercise and Wellness

2. Brief summary about Planned Program

The mainstay of exercise and wellness programming is Walk Across Texas! Walk Across Texas! is an eight week program to help people of all ages support one another to establish the habit of regular physical activity. Three options are offered to participants: walk in teams of eight, classes at schools, or individually. Participants log miles and use programs on <http://walkacrosstexas.tamu.edu>. Over 100,000 people have participated since its initiation in 1996. Walk Across Texas! is a best practice type physical activity program as described by the Centers for Disease Control at <http://www.thecommunityguide.org/> It was recognized as a best program by the Texas Department of State Health Services in 2006. The Exercise and Wellness program supports the Extension Roadmap goal of improving the health, nutrition, safety, and economic security of Texas families.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

- 724 100% Healthy Lifestyle

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Twenty-five percent of Texans are obese. Twenty-five percent of children are obese. Only 25 percent of adults and 27 percent of high school students get regular, moderate exercise. 29 percent of Americans adults are not physically active at all. Estimated direct costs of obesity and inactivity together account for approximately 9.4 percent of U.S. health expenditures. Regular physical activity and controlling weight can significantly reduce the incidence and impact of chronic diseases like heart diseases, stroke, diabetes, cancer, high blood pressure and depression. Regular physical activity is also associated with fewer hospitalizations, physician visits, and medications.

2. Scope of the Program

- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)**1. Assumptions made for the Program**

People are more likely to make a behavior change, such as increased physical activity, a regular part of their daily lives if they are provided peer support over a time period of 6 to eight weeks. Moderately intensive walking, 30 minutes, 5 days per week, is effective in reducing the onset of chronic diseases such as type 2 diabetes as shown by the Diabetes Prevention Program.

2. Ultimate goal(s) of this Program

Participants in Walk Across Texas! who walk the eight weeks in teams of eight will significantly increase their physical activity level as measured by increased miles walked.

V(E). Planned Program (Inputs)**1. Estimated Number of professional FTE/SYs to be budgeted for this Program**

Year	Extension		Research	
	1862	1890	1862	1890
2008	8.2	0.0	0.0	0.0
2009	8.2	0.0	0.0	0.0
2010	8.2	0.0	0.0	0.0
2011	8.2	0.0	0.0	0.0
2012	8.2	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

A local coalition will recruit participants and provide leadership to implement Walk Across Texas! Teams of eight or classes of children at schools will be recruited to walk for eight weeks. Teams and classes are challenged to walk regularly for eight weeks, reporting their mileage on <http://walkacrosstexas.tamu.edu>, to achieve the goal of walking the approximate 830 miles across Texas on a map that allows comparisons of teams and class progress. Participants are personally recruited as well as groups like worksites, schools, churches and clubs using free media time.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class 	<ul style="list-style-type: none"> ● Public Service Announcement ● TV Media Programs

3. Description of targeted audience

Walk Across Texas! is open to anyone wanting to increase their physical activity level if they live in a community with a Texas Cooperative Extension educator.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	15300	47500	6650	0
2009	15300	47500	6650	0
2010	15300	47500	6650	0
2011	15300	47500	6650	0
2012	15300	47500	6650	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :650 2009 :650 2010 :650 2011 :650 2012 :650

V(I). State Defined Outcome

1. Outcome Target

Increased number of miles walked per week at week one compared to week eight.

2. Outcome Type : Change in Action Outcome Measure

2008 :20000 2009 : 20000 2010 : 20000 2011 :20000 2012 : 20000

3. Associated Knowledge Area(s)

- 724 - Healthy Lifestyle

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Natural Disasters (drought,weather extremes,etc.)
- Economy
- Competing Public priorities
- Competing Programatic Challenges
- Public Policy changes
- Government Regulations

Description

Any of the above factors could affect the implementation and number of participants in Walk Across Texas! For example, if the Texas legislature cut funding for Texas Cooperative Extension, there would be less county educators to provide leadership to the program at the local level. If a national crisis such as an act of bioterrorism happened, funding and activity priorities would change.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)

Description

Participants report their mileage every week on-line at <http://walkacrosstexas.tamu.edu>. Week one mileage is compared to week eight mileage to determine if there is improvement in physical activity levels.

2. Data Collection Methods

- On-Site
- Whole population

Description

Participants log in weekly mileage at <http://walkacrosstexas.tamu.edu> throughout the eight weeks of Walk Across Texas!

V(A). Planned Program (Summary)

1. Name of the Planned Program

Food and Nutrition Education for Limited Resource Audiences

2. Brief summary about Planned Program

The Food Stamp Nutrition Education Program (titled Better Living for Texans), is specifically targeted towards food stamp recipients and applicants to help them make better food choices, improve nutrition knowledge, and adopt specific food safety and nutrition behaviors to improve their food security status, improve their health, and reduce out-of-pocket food expenses. The Food Safety program supports TCE Extension Roadmap goal to improve the health, nutrition, safety, and economic security of Texas families.

3. Program existence : Mature (More than five years)

4. Program duration : Medium Term (One to five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 703 50% Nutrition Education and Behavior
- 704 25% Nutrition and Hunger in the Population
- 801 25% Individual and Family Resource Management

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

In Texas, nearly 16% of households live at or below poverty; an equal percentage have difficulty feeding their families safe and nutritious food at some point during the year (food insecurity). The Food Stamp Nutrition Education Program (titled Better Living for Texans), is specifically targeted towards food stamp recipients and applicants to help them make better food choices, improve nutrition knowledge, and adopt specific food safety and nutrition behaviors to improve their food security status, improve their health, and reduce out-of-pocket food expenses. Because of the high rates of poverty and food insecurity (compared to national averages), this program is critical in the state of Texas.

2. Scope of the Program

- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Our ability to deliver this program is contingent on plan approval from USDA/FNS. In addition, our ability to reach the audience is dependent on the approval of waivers from FNS that will allow us to expand our programming to audiences other than food stamp recipients and applicants (less than 50% of Texans eligible for food stamps actually participate in the program).

2. Ultimate goal(s) of this Program

There are four major goals of the Better Living for Texans/Food Stamp Nutrition Education program: (1) By participating in BLT/FSNE, participants will improve dietary quality and engage more often in physical activity; (2) By participating in FSNE, clients will adopt one or more food resource management skills such as meal planning, comparison shopping, or shopping from a list; (3) By participating in FSNE, clients will improve in one or more food safety practice such as proper hand washing, proper storage and thawing of food; and (4): By participating in FSNE, clients will indicate a reduction in out-of-pocket food expenses.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	50.9	0.0	0.0	0.0
2009	50.9	0.0	0.0	0.0
2010	50.9	0.0	0.0	0.0
2011	50.9	0.0	0.0	0.0
2012	50.9	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Nutrition education will be conducted using a variety of methods including group, individual, media, and newsletters. Group methods will either be single education events that focus on a very specific concept/behavior (e.g. washing fresh produce to reduce the risk of a foodborne illness) or a series of lessons that focus on broader concepts such as label reading or food resource management. Networking with agencies and organizations to expand outreach and identify new audiences will also occur.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Demonstrations ● Education Class ● One-on-One Intervention 	<ul style="list-style-type: none"> ● Newsletters ● TV Media Programs ● Public Service Announcement

3. Description of targeted audience

The target audience for the Better Living for Texans program is food stamp recipients and applicants. However, Texas has been granted waivers by USDA/FNS that allow us to extend our program to other limited resource audiences. These audiences include: women receiving WIC benefits, children attending schools in which 50% or more of the children receive free or reduce meals; children and parents in Head Start programs; individuals receiving food at a food bank or food pantry; and children who participate in the Summer Food Service Program.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	73700	157300	55300	0
2009	73700	157300	55300	0
2010	73700	157300	55300	0
2011	73700	157300	55300	0
2012	73700	157300	55300	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :7500 2009 :7500 2010 :7500 2011 :7500 2012 :7500

V(I). State Defined Outcome

1. Outcome Target

% of BLT participants who increase their physical activity by participating in a walking program.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :30 2009 : 30 2010 : 35 2011 :40 2012 : 40

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population
- 801 - Individual and Family Resource Management

1. Outcome Target

Amount of monthly out-of-pocket food expenses reportedly saved by program participants.

2. Outcome Type : Change in Action Outcome Measure

2008 :40

2009 : 40

2010 : 40

2011 :40

2012 : 40

3. Associated Knowledge Area(s)

- 703 - Nutrition Education and Behavior
- 704 - Nutrition and Hunger in the Population
- 801 - Individual and Family Resource Management

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Public Policy changes
- Government Regulations

Description

The implementation of the Better Living for Texans program is contingent upon continued funding by USDA/FNS. Because the program is implemented according to the federal guidance plan on food stamp nutrition education, any recommended changes in what should be taught in this program will impact our outcomes. Finally, our outcomes are heavily dependent on the willingness of the target audience to participate in the evaluation of the program. This audience can be a challenge to reach; follow-up surveys have historically been difficult to implement.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)

Description

Evaluation of the program will be accomplished by using a pre and post test to gauge the extent that participants adopt selected behaviors by adults who graduate from a 3-lesson series. For those who participate in a single education event, we will utilize surveys to assess knowledge gained and intent to change behavior.

2. Data Collection Methods

- Whole population
- Sampling
- On-Site
- Structured

Description

A combination of onsite surveys and structured interviews will be used to collect data for this program.

V(A). Planned Program (Summary)**1. Name of the Planned Program**

Food Safety

2. Brief summary about Planned Program

To meet the need for quality food safety education in Texas retail food establishments, the Food Protection Management program was developed. Accredited by the Department of State Health Services, this program prepares food service workers to sit for state Certified Food Manager Exam. Using the curriculum Food Safety: It's Our Business, the program is conducted at the county level by Extension agents over a one- or two-day period. Educational lessons and activities of the program focus on the following areas: (1) Enhanced use of temperature control measures in food service, such as thermometer use, time and temperature control, safe internal cooking and holding temperatures, thawing procedures and general storage temperatures; (2) Increased adoption of proper hygiene and hand washing practices of food service employees and managers; (3) Increased adoption of practices to avoid cross-contamination such as proper storage, washing and sanitizing of utensils and equipment between use, and employee hygiene practices; and (4) Increased adoption of pest management practices to keep insects, rodents and other disease-causing pests under control. County Extension Agents, who are qualified instructors, provide the program in more than 80 counties throughout the state.

Research is conducted to develop new technology to both detect and prevent the contamination of food products by bacterial, viral, and parasitic pathogens.

The Food Safety program supports the TAES Science Roadmap goal to improve public health and well-being and the TCE Extension Roadmap goal to improve the health, nutrition, safety, and economic security of Texas families.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

- 712 100% Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

The Centers for Disease Control and Prevention (CDC) estimate that foodborne diseases cause approximately 76 million illnesses, 325,000 hospitalizations and 5,000 deaths each year. Populations most vulnerable to foodborne disease include pregnant women, the elderly, the very young, and individuals with a chronic disease as well as those with weakened immune systems.

These foodborne diseases are linked to various bacterial, viral, and parasitic pathogens. According to information from the Centers for Disease Control and Prevention, over two hundred and fifty different types of foodborne diseases have been described.

Common symptoms of foodborne disease include nausea, vomiting, diarrhea, abdominal cramping, fever, and headache. These symptoms are dependent on the type and amount of microbe ingested.

In 2000, the United States Department of Agriculture Economic Research Service estimated that the medical, productivity loss, and premature death costs related to five foodborne pathogens totaled \$6.9 billion annually. The specific foodborne pathogens used in this estimation included Campylobacter, Salmonella, E. coli O157, E. coli non-O157 STEC, and Listeria monocytogenes. Foodborne disease is a costly problem.

More than half of all food borne illnesses is attributed to improper food handling in restaurants. Because more than 40% of all food dollars is spent on food prepared outside the home, food safety is a top concern among consumers. Therefore, food safety education is a critical prevention component for reducing the risk for food borne diseases.

2. Scope of the Program

- In-State Research
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

1. County Extension Agents will continue to become qualified instructors for the program.
2. Program participants are able to practice the knowledge and skills learned during the program in their place of work (the food service establishment).
3. Evaluation of the program is based on self-reported data; it is assumed that the responses are truthful.

2. Ultimate goal(s) of this Program

The ultimate goals of this program are: (1) to train food service employees, managers, and owners the knowledge and skills needed to improve food safety practices that are critical to reducing the risk of a foodborne disease outbreak; (2) to motivate program participants to return to their place of work and train additional workers in the food service establishment so that others will adopt the food safety behaviors featured in the program; (3) conduct food safety research that reduces foodborne diseases linked to bacterial, viral, and parasitic pathogens.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	4.8	0.0	5.0	0.0
2009	4.8	0.0	5.0	0.0
2010	4.8	0.0	5.0	0.0
2011	4.8	0.0	5.0	0.0
2012	4.8	0.0	5.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

County Extension Agents will be provided training to become a qualified instructor for the Food Protection Management Program. Additional training will be provided/identified so that instructors can maintain their instructor qualification status per the Texas Department of State Health Services.

The program will be implemented in counties across the state that have a County Extension Agent who is qualified to teach the program.

The program will be evaluated by surveying participants throughout the fiscal year.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Demonstrations ● Education Class ● Workshop ● Group Discussion 	<ul style="list-style-type: none"> ● Newsletters

3. Description of targeted audience

Individuals who are employed in the commercial food service industry. This includes cooks, managers, and owners who are affiliated with foodservice establishments including restaurants, school food service, bed and breakfasts, prisons, and other establishments that prepare and serve food to individuals. In addition, the program is also offered (on a limited basis) to high school students as part of workforce development.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	2700	15000	400	0
2009	2700	15000	400	0
2010	2700	15000	400	0
2011	2700	15000	400	0
2012	2700	15000	400	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :1 2009 :0 2010 :0 2011 :1 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	25	0
2009	25	0
2010	25	0
2011	25	0
2012	25	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :170 2009 :170 2010 :170 2011 :170 2012 :170

- # of research-related projects.

2008 :7 2009 :7 2010 :7 2011 :7 2012 :7

V(I). State Defined Outcome

1. Outcome Target

FPM Pass/Fail Rate - the is the percentage of participants who pass the DSHS Certified Food Manager exam on the first attempt.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :80 2009 : 80 2010 : 85 2011 :85 2012 : 85

3. Associated Knowledge Area(s)

- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

1. Outcome Target

Self-reported adoption of using a food thermometer to measure internal temperatures of hot/cold foods being held (% of individuals who report practicing this behavior "always" after completing the program)

2. Outcome Type : Change in Action Outcome Measure

2008 :75 2009 : 80 2010 : 80 2011 :80 2012 : 80

3. Associated Knowledge Area(s)

- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

1. Outcome Target

Self-reported adoption of washing hands for 20 seconds using soap and hot water (% of participants who report practicing this behavior "always" after participating in the program).

2. Outcome Type : Change in Action Outcome Measure

2008 :80 2009 : 85 2010 : 85 2011 :90 2012 : 90

3. Associated Knowledge Area(s)

- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

1. Outcome Target

Self reported increase in the adoption of using a thermometer to determine the doneness of food (percentage of participants who report practicing this behavior "always" after participating in the program).

2. Outcome Type : Change in Action Outcome Measure

2008 :72 2009 : 75 2010 : 75 2011 :78 2012 : 78

3. Associated Knowledge Area(s)

- 712 - Protect Food from Contamination by Pathogenic Microorganisms, Parasites, and Naturally Occuring Toxins

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Government Regulations
- Competing Public priorities

Description

Our reported outcomes (extent to which behaviors are adopted) include the ability of our Agents to offer the program at or above the current level of programming, the knowledge base of our clientele, and the ability of program participants to practice the knowledge and skills that they learn in the Food Protection Management course. With respect to program participants, literacy skills of the clients as well as our ability to offer the program effectively in languages other than English could also impact our program outcomes.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)

Description

Participants will be asked to complete a retrospective (post program) evaluation survey after completing the program to assess the extent to which selected food safety behaviors featured in the program were adopted. Because participants are required to take and pass a Certified Food Manager Exam, we will also be able to compare their exam score to their reported adoption of the identified behaviors. We will also be able to gauge the pass/fail rate of our clients based on their exam scores.

2. Data Collection Methods

- Whole population
- Mail
- Tests

Description

Using a Likert scale, participants will be asked to assess the extent to which they practiced selected behaviors before the program as well as since completing the program. This survey instrument will be mailed 30 days after the program has been completed by the participant. A follow-up instrument (and reminder) will be sent 2 weeks later if the survey instrument has not been returned. The Department of State Health Services will provide Texas Cooperative Extension with each participant's exam score. This will assist us in tracking the pass/fail rate both state-wide and county-wide.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Leadership and Volunteer Development

2. Brief summary about Planned Program

Volunteers are one of the most important commodities to Texas Extension. They are important in ensuring that Texas Extension maintains relevance, they help the agency deliver programs, and provide interpretation support to name a few. Mobilizing and organizing a strong volunteer base is essential to the mission of Texas Extension. Texas Extension has the largest volunteer program of any agency in Texas. But with increasing competition for resources, funding, staff and time, sound decisions regarding volunteer recruitment, management, supervision, and administration will be crucial to sustaining current programs, partnerships and developing new opportunities.

The Leadership and Volunteer Development program supports the TCE Extension Roadmap goal to prepare Texas youth to be productive, positive, and equipped with life skills for the future.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 803 40% Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 60% Youth Development

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

All research concerning agencies of the future leads us to know that expanding the outreach and programming components through all volunteer efforts is essential. Volunteers are the real heart and hands of many different Extension programs, extending the reach into every community and every neighborhood in Texas. Extension volunteers help people to gain knowledge and skills that will benefit them for life. And, in return, volunteers have the satisfaction of knowing they're making a difference for their friends and neighbors. Much of the work Extension volunteers do grows out of their interests and experiences, but they also receive training from educators from various disciplines. Thus volunteers improve their own skills while helping others.

2. Scope of the Program

- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

* Texas counties (254) will incorporate a volunteer based Extension program.

* Communities will recognize the importance of developing leadership skills of people in the population thus resulting in volunteer and civic involvement.

* County Extension faculty readily understand the grass roots mission by developing competencies to implement and manage volunteers.

2. Ultimate goal(s) of this Program

Develop a volunteer system in Texas Cooperative Extension that adheres to our "grass roots" mission by developing competencies of County Extension Agents so that they can effectively manage volunteers to maximize our ability to provide excellence in educational programs.

Youth will become engaged in community problem solving via governance and partnership with adults in community organizations and agencies.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	36.3	0.0	0.0	0.0
2009	36.3	0.0	0.0	0.0
2010	36.3	0.0	0.0	0.0
2011	36.3	0.0	0.0	0.0
2012	36.3	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

The following activities will be used to implement this program:

- *Provide training for Extension professionals on the ISOTURE volunteer management model and key concepts related to volunteer administration.
- *Provide training and guidance to Extension specialists in the role and support of program development related to volunteerism.
- *Provide orientation and training directly to volunteers in preparation for their service resulting in a positive experience.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Other 1 (Mentoring) ● Education Class ● Group Discussion ● Workshop ● One-on-One Intervention 	<ul style="list-style-type: none"> ● Newsletters ● Public Service Announcement ● Web sites ● TV Media Programs

3. Description of targeted audience

The following groups are included in the target audience for this program:

- *Youth and adult volunteers who have a need or interest in a Texas Extension program.
- *Extension educators
- *Youth and adults who have an interest in community development and partnerships.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	29400	232500	36000	0
2009	29400	232500	36000	0
2010	29400	232500	36000	0
2011	29400	232500	36000	0
2012	29400	232500	36000	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # group educational sessions conducted.

2008 :3700 2009 :3700 2010 : 3700 2011 :3700 2012 :3700

V(I). State Defined Outcome

1. Outcome Target

% of participants who report an increased knowledge of leadership development practices.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

1. Outcome Target

% of participants who plan to or adopt leadership development practices.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :35 **2009 :** 35 **2010 :** 35 **2011 :**35 **2012 :** 35

3. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

1. Outcome Target

of counties who adopt and implement County Youth Boards.

2. Outcome Type : Change in Action Outcome Measure

2008 :230 **2009 :** 254 **2010 :** 254 **2011 :**254 **2012 :** 254

3. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

1. Outcome Target

of counties who adopt and implement at least one youth oriented Master Volunteer program.

2. Outcome Type : Change in Action Outcome Measure

2008 :65 **2009 :** 65 **2010 :** 75 **2011 :**75 **2012 :** 75

3. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

1. Outcome Target

of counties who adopt and implement youth and adult partnerships.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 **2009 :** 65 **2010 :** 75 **2011 :**75 **2012 :** 75

3. Associated Knowledge Area(s)

- 803 - Sociological and Technological Change Affecting Individuals, Families and Communities
- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Populations changes (immigration,new cultural groupings,etc.)
- Competing Programatic Challenges
- Economy
- Competing Public priorities

Description

The following are external factors that could affect this program:

*Changes in funding could increase or limit efforts depending on available monies.

*Emerging issues and changes in priorities for current programs could also have an impact on the success of this program.

The changing demographics of Texas could influence and change the targeted audience.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- Mail
- Whole population
- Other (Web-Based Surveys)
- On-Site
- Sampling
- Observation

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Life Skills for Youth

2. Brief summary about Planned Program

The Life Skills for Youth program will focus on enhancing the skills needed for youth to become productive adults. Specifically, this program will serve to highlight the work in Texas associated with project experiences including club projects, curriculum enrichment, and special interests. These areas are represented by various subject areas including but not limited to agricultural, human health, and other less historic projects such as photography, computers, etc.

The Life Skills for Youth program supports the TCE Extension Roadmap goal to prepare Texas youth to be productive, positive, and equipped with life skills for the future.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 806 100% Youth Development

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Youth issues were identified by Texas residents as a high priority for Extension programming. In Texas there are approximately 4 million school-aged youth. Texas 4-H currently enrolls 25% of these youth through various programs.

Nationally, youth related issues include Weight Management, Harmful Substance Abuse, Teen Sexuality, Accepting and Respecting Others, Youth Violence, Unsupervised Time, Youth Literacy, and Death by Accident. During 2004, Texas Counties identified a number of youth related issues which strongly parallel national concerns.

Texas 4-H offers nine areas of program delivery to meet the needs of a diverse state with complex issues. A comprehensive urban plan includes faculty from the 20 most populated Texas counties who work cooperatively toward a consistent program directed to serve the needs of urban youth. Furthermore, focused efforts are directed toward traditionally under-served clientele and accommodations were made to meet the needs of the disadvantaged.

2. Scope of the Program

- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

One major assumption in Texas regarding the 4-H program is that each of the 254 counties in the state will offer 4-H to the youth in that county. Faculty (agents and specialists) are held accountable for providing 4-H programs state-wide and this is documented through program plans and accountability systems. Each county must also have a youth board to identify and address issues of importance in that county.

This program also assumes that youth are willing to participate in 4-H and that each youth who enters the program will be involved in at least one project experience.

2. Ultimate goal(s) of this Program

The goal for the Life Skills for Youth program is an educated child who is productive in society.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	46.3	0.0	0.0	0.0
2009	46.3	0.0	0.0	0.0
2010	46.3	0.0	0.0	0.0
2011	46.3	0.0	0.0	0.0
2012	46.3	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

This program is based on six learning experiences tied to the work of the project for which they participate. Each project is experientially focused. Examples of activities include workshops, demonstrations, and hands-on experiences. Numerous materials and support is provided by the Texas 4-H faculty to agents and specialists. These items are used for implementation of projects and for professional development of staff. Use of volunteers is significant in enhancing and extending efforts to reach and provide youth with positive experiences.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Workshop ● Demonstrations ● One-on-One Intervention ● Education Class ● Group Discussion 	<ul style="list-style-type: none"> ● Web sites ● Newsletters ● Public Service Announcement ● TV Media Programs

3. Description of targeted audience

All youth of 4-H age are targeted for programs depending on location, identified issues and programs of interest.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	120500	462600	175600	0
2009	120500	462600	175600	0
2010	120500	462600	175600	0
2011	120500	462600	175600	0
2012	120500	462600	175600	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 :12700 2009 :12700 2010 : 12700 2011 :12700 2012 :12700

V(I). State Defined Outcome

1. Outcome Target

% of youth who increase knowledge of life skills concepts and practices.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

% of youth who report they have adopted life skills concepts and practices.

2. Outcome Type : Change in Action Outcome Measure

2008 :35 2009 : 35 2010 : 35 2011 :35 2012 : 35

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

% of youth who plan to pursue higher education interest or career interest as a result of their project work.

2. Outcome Type : Change in Condition Outcome Measure

2008 :10

2009 : 10

2010 : 10

2011 :10

2012 : 10

3. Associated Knowledge Area(s)

- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Appropriations changes
- Competing Public priorities

Description

As with other programs, external factors could either inhibit or enhance the outcomes of the efforts of the Life Skills for Youth program. Changes in funding could increase or limit our efforts depending on an increase or decrease in available monies. Emerging issues and changes in priorities for current programs could also have an impact on the success of this program. It is believed that the broad scope of the Texas 4-H program and the historic priority placed on youth programs by society will limit these factors.

Finally, the demographics of Texas are rapidly changing and these changes will likely affect how Texas 4-H recruits and retains youth in our program.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- Sampling
- Whole population
- Other (Web-based)
- Mail

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)**1. Name of the Planned Program**

Livestock and Meat Quality, Safety, and Productivity

2. Brief summary about Planned Program

Texas ranks first in the nation in total livestock value and also has the broadest spectrum producers and variation in production environments. High production costs and variable sale receipts for all livestock species necessitates adoption of best management practices to efficiently produce livestock and their resulting end-products that are cost-competitive with consumer alternatives while meeting the food quality and safety standards expected by our society. Educational programs are needed to increase producer awareness of consumer concerns and implementation of advancements in research proven production practices and developments in technologies to meet those needs while increasing net returns from livestock operations. Research and education programs will focus on livestock genetics, nutrition, reproduction, both enhanced value and cost effective best management practices, and how producers can increase profitable production efficiency while still producing high quality, safe, wholesome end products. Specific livestock recommended management practices in selection and use, nutrition, reproductive physiology, health, identification and meat science will be emphasized. Other factors that influence product acceptability in the market such as marketing methods and food safety issues will be stressed. The target audience is composed of beef cattle, horse, dairy, sheep, goat and swine producers, commodity group leadership, Extension educators and youth enrolled in 4-H and FFA livestock projects. The Livestock and Meat Quality, Safety, and Profitability program supports the TAES Science Roadmap goal for enhancing competitiveness and prosperity of urban and rural agricultural industries, and the TCE Extension Roadmap goal of ensuring a sustainable, profitable, and competitive food and fiber system in Texas.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

- 301 10% Reproductive Performance of Animals
- 302 25% Nutrient Utilization in Animals
- 303 5% Genetic Improvement of Animals
- 306 5% Environmental Stress in Animals
- 307 20% Animal Management Systems
- 308 20% Improved Animal Products (Before Harvest)
- 313 5% Internal Parasites in Animals
- 315 10% Animal Welfare/Well-Being and Protection

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Texas ranks first in total cattle/calves, sheep/goats and horses. Milk production expanded by 7.9 % in 2005 with 6.4 billion pounds of milk. Nationwide, some 15 % of cattle and horses are in Texas. Traditional wool sheep are being replaced by hair sheep, and goats for brush control and meat production represent changing markets related to incentive programs, ethnicity and agricultural exemption. Well over 75,000 swine, lambs, goats, cattle and horses are owned and exhibited by youth annually in Texas. Priorities include livestock ownership/production for food, profit, land management, youth development, quality of life and recreation. Demand exists for owner/producer/user knowledge, skills and management tools related to the selection, evaluation, breeding, development/use and marketing of livestock and related products. Quality, safety and consistency are key challenges. Best management practices based on research, industry needs and industry practices apply to adult and youth livestock industry participants, commodity and corporate groups.

2. Scope of the Program

- Integrated Research and Extension
- In-State Research
- Multistate Research
- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Beef will continue to be in demand as a nutrient dense food with gross output exceeding \$5 billion annually. Therefore, interest and need for education related to livestock and product utilization, quality and safety, is expected to remain high. The dairy industry is moving in the state as old issues are replaced by new challenges and opportunities. Youth will continue to choose livestock project involvement for character education and life skills, and these youth represent the base for livestock production in the future. Small ruminants will become more popular on small acreages as they contribute to land management and also as meat sources.

2. Ultimate goal(s) of this Program

Goals are to provide educational opportunities in 7 major areas: Beef Quality Assurance and Best Management Practices for the Cattle and Meat Industries, Meat Quality and Safety, Pork Quality Assurance/Quality Counts, Sustainable Enhancement of Dairy Profitability, Meat Goat and Hair Sheep Initiatives, Internal Parasite Management for Enhanced Production of Small Ruminants, and Horse Production, Management and Use.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	53.0	0.0	33.0	0.0
2009	53.0	0.0	33.0	0.0
2010	53.0	0.0	33.0	0.0
2011	53.0	0.0	33.0	0.0
2012	53.0	0.0	33.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Research as well as group and individual education will be ongoing across the 7 key subject matter/commodity areas. Methods of education include public meetings, individual support, printed and video/DVD materials and web-based materials. Collaboration with breed associations, commodity groups and corporations will target research and educational needs of a diverse livestock industry across the state, involving both youth and adults.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Education Class ● One-on-One Intervention ● Workshop 	<ul style="list-style-type: none"> ● Newsletters ● TV Media Programs ● Web sites

2. Outcome Type : Change in Action Outcome Measure

2008 :50 2009 : 50 2010 : 50 2011 :50 2012 : 50

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 306 - Environmental Stress in Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 313 - Internal Parasites in Animals
- 315 - Animal Welfare/Well-Being and Protection

1. Outcome Target

% of livestock owners/producers/commodity group reps that report increased knowledge of best management practices to improve quality and profitability.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :70 2009 : 70 2010 : 70 2011 :70 2012 : 70

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 306 - Environmental Stress in Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)
- 313 - Internal Parasites in Animals
- 315 - Animal Welfare/Well-Being and Protection

1. Outcome Target

% of livestock owners/producers that report a savings in money or increased profit by best management practices adopted.

2. Outcome Type : Change in Condition Outcome Measure

2008 :10 2009 : 10 2010 : 10 2011 :10 2012 : 10

3. Associated Knowledge Area(s)

- 301 - Reproductive Performance of Animals
- 302 - Nutrient Utilization in Animals
- 303 - Genetic Improvement of Animals
- 306 - Environmental Stress in Animals
- 307 - Animal Management Systems
- 308 - Improved Animal Products (Before Harvest)

- 313 - Internal Parasites in Animals
- 315 - Animal Welfare/Well-Being and Protection

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Populations changes (immigration,new cultural groupings,etc.)
- Economy
- Natural Disasters (drought,weather extremes,etc.)
- Competing Programatic Challenges
- Public Policy changes
- Government Regulations

Description

Livestock ownership, production and use in Texas has been influenced by natural disasters such as hurricanes, floods, drought and wildfires. Routine management of livestock has been influenced and significant need exists for education in emergency and alternative management plans. Production costs and incentives for livestock production, management, and use are influenced by economic changes. Higher fuel prices, ag exemptions, feed costs and health care costs are all factors. Public policy changes and government regulations challenge educators to provide up-to-date, neutral information that helps livestock participants make decisions. Population shifts and use of available land for productive and meaningful livestock production bring opportunities and challenges to livestock owners/producers/users and the associations/corporations/groups that make up this diverse industry.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

Description

Outcome measures include pre-post knowledge assessment, adoption of best management practices and elimination of non-beneficial practices, and change in confidence/competence. Changes in time and money spent/saved/invested for livestock production will be measured in selected areas.

2. Data Collection Methods

- Mail
- Whole population
- Other (Web-Based Surveys)
- Sampling
- Observation
- On-Site

Description

Data collection methods will involve samples of population associated with educational programs. Outputs and outcomes will be based on data collected from that percentage of participants who complete evaluation instruments. Specific survey approaches related to short, medium and long-term outcomes will be evaluated across respondents to measure knowledge change, behavior change and impact on various aspects of the livestock industry.

V(A). Planned Program (Summary)

1. Name of the Planned Program

Out of School Time

2. Brief summary about Planned Program

Extension's response to out of school time is designed to build collaborations with out of school time providers and develop and/or improve the quality of activities being offered to youth involved. With the increase in single parent families and two parents working outside of the home, the need has increased for quality out of school time programs that provide a safe place for children to go before and after school. Out of school programs need additional resources for education and Extension has a variety of resources available to enrich the out of school program.

The Out of School Time program supports the TCE Extension Roadmap goal to prepare Texas youth to be productive, positive, and equipped with life skills for the future.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

- 806 100% Youth Development

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The issues associated with out of school time are a result of more families with two parents working outside of the home and more single parent families. These families need a safe place for their children to go before and after school and during the summer months that can provide enriching and hands-on learning activities that are appealing to the children.

Extension's response to this issue is to equip Extension educators in establishing collaborations with out of school time programs and provide training, curriculum resources, and more to strengthen the program. 4-H is an important youth organization that can be integrated into the out of school time programs to focus on the development of life skills.

Research shows that youth involved in a quality out of school time are less at risk for delinquent behavior and their grades in school improve with the integration of enrichment activities that support the school curriculum.

2. Scope of the Program

- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The following assumptions are made about this program:

Building collaborations with out of school time programs will expand the network in the community, increase the resources available, and increase the potential for fund development through grant partnerships.

Incorporating 4-H into the out of school time programs can increase 4-H enrollment.

Incorporating 4-H into the out of school time programs can increase leadership, citizenship and life skills in youth.

2. Ultimate goal(s) of this Program

The goals of the Out of School Time program are:

Increase the number of 4-H After-school clubs

Increase the number of collaborations with out of school time programs

Increase the number of trainings conducted with out of school time program staff in the areas of youth development, curriculum resources training, establishing 4-H clubs

Develop after-school curriculum targeting 6-8 grade youth that is career focused

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	5.4	0.0	0.0	0.0
2009	5.4	0.0	0.0	0.0
2010	5.4	0.0	0.0	0.0
2011	5.4	0.0	0.0	0.0
2012	5.4	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

The following activities will be used to conduct the Out of School Time program:

Provide training for Extension professionals on collaborating with out of school programs, establishing 4-H clubs in after-school programs, and after-school curriculum resources

Write 6-8 grade after-school curriculum that is career oriented

Establish collaborations between county 4-H programs and out of school programs

Extension educators conduct training for out of school programs in youth development, curriculum resources, and establishing 4-H clubs in out of school programs

Evaluate youth involved in out of school time programs on their development of life skills

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Group Discussion ● One-on-One Intervention ● Workshop ● Education Class 	<ul style="list-style-type: none"> ● Other 1 (Curriculum sales) ● Web sites ● Newsletters

3. Description of targeted audience

The following groups are the target audience for this program:

Youth in Texas involved in out of school time programs and activities

Extension educators

Out of school time educators and programs

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	11000	21600	38500	0
2009	11000	21600	38500	0
2010	11000	21600	38500	0
2011	11000	21600	38500	0
2012	11000	21600	38500	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of curriculum developed for 6-8 grade students that emphasizes career exploration.

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

- # of group education sessions conducted.

2008 :4350 2009 :4350 2010 :4350 2011 :4350 2012 :4350

- Number of trainings conducted by Extension educators with out of school time programs.

2008 :10 2009 :10 2010 :10 2011 :10 2012 :10

V(I). State Defined Outcome

1. Outcome Target

% of 4-H after-school club participants who develop new life skills.

2. Outcome Type : Change in Action Outcome Measure

2008 :25 2009 : 25 2010 : 25 2011 :25 2012 : 25

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

of new 4-H after-school clubs established.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :10 2009 : 10 2010 : 10 2011 :10 2012 : 10

3. Associated Knowledge Area(s)

- 806 - Youth Development

1. Outcome Target

of collaborations with out of school time programs.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :10 2009 : 10 2010 : 10 2011 :10 2012 : 10

3. Associated Knowledge Area(s)

- 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Economy
- Competing Programatic Challenges

Description

The following external factors may affect this program:

Economy can impact out of school time through layoffs or job terminations. Families may not be able to afford out of school time programs for their children.

Currently there is no state appropriations for out of school time, however, if appropriations were provided, programming and resources for this audience could be increased and improved, resulting in more youth involved in out of school time programs

There are other groups/agencies/organizations that provide resources and training for out of school time programs. This could impact Extension's effectiveness in collaborating with out of school time programs

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- Mail
- Other (Web-Based Surveys)
- Whole population
- Sampling
- On-Site
- Observation

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)**1. Name of the Planned Program**

Parenting and Dependent Care

2. Brief summary about Planned Program

The Parenting and Dependent Care program will focus on issues related to child care, elder care, and parent-child relationships. Specifically, this multi-faceted program seeks to improve the knowledge and skills of child care providers, professionals and volunteers working with the elderly, and parents through a variety of educational methods including one-on-one instruction, face-to-face conferences/workshops, newsletters, fact sheets, and self-study courses. The Parenting and Dependent Care program supports the TCE Extension Roadmap goal to improve the health, nutrition, safety, and economic security of Texas families.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

- 802 100% Human Development and Family Well-Being

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Changes in family life over the last several decades have influenced the ability of family members to adequately address the needs of children and aging adults. Families need access to research-based educational resources and training programs to assist them in their job of raising responsible citizens. According to recent statistics, over 1/4 of today's children reside in single-parent households where they are much more likely to experience poverty (Forum on Child & Family Statistics, 2005). Nearly 5 million infants, young children, and teens live in households headed by a grandparent. Over 20 million children are currently living apart from their biological fathers. Researchers have found that children who grow up with absent fathers are at a greater risk to a host of negative outcomes (e.g., poverty, school failure, child abuse, suicide, criminal behavior, early sexual activity, and drug and alcohol abuse). These risks diminish substantially when children grow up with an active and loving father in the home (Horn & Sylvester, 2002).

Child maltreatment rates in the U.S. remain extremely high. Recent statistics indicate that an estimated 906,000 children were found to be victims of child maltreatment in 2003, with the majority falling under the category of child neglect (63%) (National Clearinghouse on Child Abuse and Neglect, 2005). Nearly 84% of substantiated child maltreatment cases occurred at the hands of a parent or parents. In Texas, 224,010 children were alleged to be victims of child abuse or neglect in 2004. In that same year, 50,529 were confirmed victims (Texas Kids Count Annual Data Book, 2005). Parenting programs that provide education and skills training to parents covering a variety of topics (e.g., child development, communication, nutrition, health and safety, etc.) have been demonstrated to be effective in reducing child maltreatment rates (Reppucci et al., 1997; U.S. Dept. of Health and Human Services, 2001).

As families have changed over the last several decades, so has the demand for quality child care. According to labor statistics, 65% of women with children younger than 6, and 78% of women with children ages 6 to 17 are currently working outside the home. Over 60% of children from birth through age 6 (not yet in kindergarten) received some form of child care on a regular basis from persons other than their parents (Forum for Child & Family Statistics, 2004). The Texas Workforce Commission (TWC) estimates that there are over 100,000 child care providers caring for more than 760,000 children under the age of 13 in licensed or regulated child care facilities in the state of Texas (TWC, 2003). Having a well-trained child care workforce is essential to providing the high quality child care that children need to develop physically, socially, emotionally, and cognitively. Texas has the 5th largest population of older adults in the U.S. Many elderly are unable to care for themselves due to illness or age-related disabilities (e.g., Alzheimer's Disease) and, therefore, rely upon family members, volunteers, and eldercare professionals to provide information, resources, and day-to-day care and support.

2. Scope of the Program

- Multistate Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The quality of care that children and aging adults receive has a direct impact on their quality of life. Child care providers, eldercare volunteers and professionals, and parents can improve the quality of care that they provide for children and adults by improving their knowledge and skills in each of these areas through educational opportunities that allow them to apply the information they have learned in practical settings. The Dependent Care and Parenting Program equips parents, volunteers, and professionals with the knowledge and skills they need to provide the best possible care to children and aging adults. In addition, child care and elder care professionals are required by the state of Texas to obtain clock hour credits and continuing education units to fulfill annual training requirements. The Dependent Care and Parenting Program provides a valuable resource to professionals to help them obtain the training they need to remain employed in their respective professions.

2. Ultimate goal(s) of this Program

The primary goals of the Dependent Care and Parenting Program include:

1. To provide research-based information, resources, and programs to child care providers, elder care professionals and volunteers, and parents.
2. To improve the knowledge and skills of child care and eldercare professionals and parents so that they can provide quality of care for those they work with (e.g., children and aging adults).
3. To help child care and eldercare professionals obtain state-mandated clock hour credits and continuing education units.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	11.8	0.0	0.0	0.0
2009	11.8	0.0	0.0	0.0
2010	11.8	0.0	0.0	0.0
2011	11.8	0.0	0.0	0.0
2012	11.8	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Texas Cooperative Extension's Family Development and Resource Management Unit is committed to providing educational programs to support and strengthen Texas families. In the areas of parenting, child care, and dependent care, Texas Cooperative Extension offers a wide range of programs and resources to citizens across the state. Programs and resources include train-the-trainer workshops for professionals and volunteers, multi-session parent education workshops, 1-2 hour lectures, satellite and other distance education workshops, self-study child care training guides, internet resources (e.g., online child care courses, fact sheets, research briefs, trend data, links to juried websites), and newsletters. In addition, over 300 programs related to parenting, child care, and dependent care can be accessed through Extension's Educational Resource Library at Texas A&M University.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Group Discussion ● Workshop ● One-on-One Intervention ● Other 1 (Web-Based Courses) ● Education Class 	<ul style="list-style-type: none"> ● TV Media Programs ● Newsletters ● Web sites

3. Description of targeted audience

Target audiences for child care programming include adults and teens providing care for children birth through age 10 in family, center and school-aged settings. Target dependent care audiences include adults and teens providing care for adults and children who are unable to provide some portion of care for themselves due to illness or age-related disabilities. Programs and resources are accessible to target audiences regardless of gender, marital status, family status, race/ethnicity, income level, or educational level. It is estimated that 70% of this audience falls under the category of “low-income.”

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	15100	38000	7000	0
2009	15100	38000	7000	0
2010	15100	38000	7000	0
2011	15100	38000	7000	0
2012	15100	38000	7000	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 :0 2009 :0 2010 :0 2011 :0 2012 :0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	0	0
2009	0	0
2010	0	0
2011	0	0
2012	0	0

V(H). State Defined Outputs

1. Output Target

- # of group educational methods conducted.

2008 :1030 2009 :1030 2010 : 1030 2011 :1030 2012 : 1030

V(I). State Defined Outcome

1. Outcome Target

% of child care providers who increase their knowledge of child care best practices as a result of participating in child care provider trainings.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

% of dependent care providers who increase their knowledge of dependent care best practices as a result of participating in depend care trainings.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

% of parents who increase their knowledge of parenting practices as a result of attending parenting trainings.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

1. Outcome Target

% of fathers (father-figures) who increase the amount of time spent reading to their children.

2. Outcome Type : Change in Action Outcome Measure

2008 :50 2009 : 50 2010 : 50 2011 :50 2012 : 50

3. Associated Knowledge Area(s)

- 802 - Human Development and Family Well-Being

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Programatic Challenges
- Populations changes (immigration,new cultural groupings,etc.)
- Appropriations changes
- Competing Public priorities

Description

Numerous factors could potentially influence the expected outcomes from the Dependent Care and Parenting Program. Adequate funding is needed to support the overall program. If funding is decreased (due to appropriation changes) the program would have to be reduced in size and scope. If funding is increased, the program could be expanded to reach a broader audience across the state of Texas. Public priorities change over time and this could impact the specific issues that are addressed by the program. Finally, demographic changes in the state of Texas could impact how programs are delivered (e.g., need for culturally appropriate training, Spanish language resources, etc.).

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

Description

The common strategies employed for evaluation studies involve the use of both pre/post and retrospective studies. Use of these strategies will be contingent upon the type of data to be collected and the target audience.

2. Data Collection Methods

- On-Site
- Other (Web-Based Surveys)
- Sampling
- Whole population
- Mail

Description

A variety of methods may be used to collect data. The most common for this program are on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data.

V(A). Planned Program (Summary)**1. Name of the Planned Program**

Range Management

2. Brief summary about Planned Program

Land stewardship, leading to rangeland sustainability, requires wise and proper management of the total rangeland ecosystem. This planned program will focus on achieving understanding of rangeland ecosystems by managers and the general public. It will give clientele the basis for making better land-management and firm level decisions, the ability to manage risk, and the knowledge necessary to meet natural resource management goals and objectives. It will address the issues of rangeland health and restoration; the production of abundant, quality water from rangeland watersheds; the management of weeds and brush on rangeland; and increase awareness of the spread of exotic, invasive plants in Texas. Evaluation of the program will be through the use of Retrospective-Post instruments evaluating knowledge gained, attitudes changed, skills learned, and/or adoption. The ability to make informed decisions will be measured.

The Range Management program supports the TAES Science Roadmap goal for sustaining healthy ecosystems and conserving natural resources, and the TCE Extension Roadmap of enhancing natural resource conservation and management.

3. Program existence : Intermediate (One to five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

- 112 40% Watershed Protection and Management
- 121 60% Management of Range Resources

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Although Texas is the second most populated state, most of its land area is in rural settings. Seventy percent of the total acreage (over 80 million acres) is classified as rangelands and permanent pastures. These lands provide forage for livestock, habitat for wildlife, water resources, improved air quality, open space for recreation, and other important resources and products. Rangeland sustainability must be maintained or enhanced by the use of management systems and practices that are economically viable, environmentally sound, and socially acceptable. The breaking up of large ranches has resulted in numerous smaller ones. This fragmentation often disrupts the ecological integrity of the landscape making management more difficult. Changing demographics and land ownership patterns have also affected management of these lands. Additionally, increasing importance of rangeland resources, such as water, has added value to improved management of watersheds. The risk of climatic events such as drought, storms, etc. are superimposed upon the management of these lands. Drought is a frequent, although erratic, often severe phenomena that has caused economic downturns, added to the risk of wildfire, and has caused degradation of Texas rangelands. The latter has resulted in rangeland restoration to be an important near term goal. The economic sustainability for landowners of rangeland depends upon the ability to manage that resource in a way to produce livestock, wildlife, and/or nature-based tourism enterprises. Four priority areas have been identified for programming. These are rangeland health and restoration, proper management of rangeland watersheds, management of native weeds and brush species, and the management of non-native (exotic) plant species on Texas rangelands.

2. Scope of the Program

- Integrated Research and Extension
- Multistate Extension
- In-State Research
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Assumptions include: (1) continued funding and critical mass of the range management research and Extension faculty and staff; (2) a targeting of audiences into age (youth and adults) and type ("new" and traditional); and annual/seasonal shifting of focus depending upon environmental and economic conditions. Flexibility is the key to successful programming.

2. Ultimate goal(s) of this Program

Goal 1. Rangeland owners/operators, ranch managers, and other interested groups ensure the proper management of rangelands and associated natural resources through stewardship education in order to support the economic sustainability of the rangeland resources for livestock, wildlife, and nature-based tourism enterprises.

Goal 2. Rangeland owners/operators will make informed decisions, based on sound, research-based information, concerning natural resources that are consistent with both individual and family goals and the potential for the resource base to support those goals.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	11.2	0.0	7.3	0.0
2009	11.2	0.0	7.3	0.0
2010	11.2	0.0	7.3	0.0
2011	11.2	0.0	7.3	0.0
2012	11.2	0.0	7.3	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Primary activities in this program will focus on development and conducting of research and educational programs to support proper management and restoration of native rangelands for clientele. Applied research and result demonstrations to support improved rangeland management will also be conducted. Training and support for County Extension Agent and Specialist training will be provided on appropriate and timely aspects of rangeland management. Emphasis will be placed on continued development of appropriate publications, websites, online courses, and other teaching materials.

Work of the Texas Agricultural Experiment Station and Texas Cooperative Extension is conducted jointly where research-based information is generated and transferred to clientele.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Other 2 (Tours and Field Days) ● Other 1 (Training Meetings) ● Education Class ● Demonstrations ● Workshop ● One-on-One Intervention 	<ul style="list-style-type: none"> ● Newsletters ● Other 1 (Publications) ● Web sites

3. Description of targeted audience

The target audiences for this program include federal and state agencies, youth and adults. The adult audiences specifically include traditional landowners, operators, absentee landowners, and "new", novice landowners that either just bought land or have made a career off the land and has returned to it.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	7000	21500	750	0
2009	7000	21500	750	0
2010	7000	21500	750	0
2011	7000	21500	750	0
2012	7000	21500	750	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 2009 : 0 2010 : 0 2011 : 1 2012 : 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	35	0
2009	35	0
2010	35	0
2011	35	0
2012	35	0

V(H). State Defined Outputs

1. Output Target

- # of group educational sessions conducted.

2008 : 250 2009 : 250 2010 : 250 2011 : 250 2012 : 250

- # of research-related projects.

2008 : 15 2009 : 15 2010 : 15 2011 : 15 2012 : 15

V(I). State Defined Outcome

1. Outcome Target

% of Land Managers who report increased knowledge leading to better decision-making.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 121 - Management of Range Resources

1. Outcome Target

% of livestock producers who report increased knowledge of rangeland monitoring, watershed management, weed and brush control.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :65 2009 : 65 2010 : 65 2011 :65 2012 : 65

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 121 - Management of Range Resources

1. Outcome Target

Result demonstrations/applied research projects.

2. Outcome Type : Change in Action Outcome Measure

2008 :15 2009 : 15 2010 : 15 2011 :15 2012 : 15

3. Associated Knowledge Area(s)

- 112 - Watershed Protection and Management
- 121 - Management of Range Resources

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Natural Disasters (drought,weather extremes,etc.)
- Appropriations changes

Description

Range Management programs are potentially affected by external factors such as those listed above. Factors such as the economy and/or appropriation changes could have a positive or negative effect on efforts to provide research and education in this area.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Other (anecdotal)
- Retrospective (post program)
- Time series (multiple points before and after program)

Description

All participants in programming activities will be administered a Retrospective-Post Test immediately after each activity in each of the four issue areas. These issue-based questions will record the knowledge/awareness of the participant before the activity and immediately after the activity. In some cases, selected participants will be sent a separate survey at the end of the year to gain information from across the State. All information will be placed on the web for collections and analysis.

2. Data Collection Methods

- Other (Web-Based Surveys)
- On-Site
- Observation
- Whole population
- Sampling
- Mail

Description

A variety of methods may be used to collect data. The most common for this program is on-site administration of surveys to all participants. In some cases, a sample of participants may be drawn for a year-end survey. Mail and/or use of web-based technologies may be used to collect this data. Observation data may also be collected where feasible and applicable.

V(A). Planned Program (Summary)**1. Name of the Planned Program**

Water Management

2. Brief summary about Planned Program

As the population of Texas increases, and needs for water become greater, it is apparent that several regions of the State will be unable to provide sufficient supplies of high quality water for agriculture, drinking water, urban uses, industry, and the environment unless extraordinary measures are taken. To help Texas manage its water resources to the greatest possible extent, scientists and specialists with TAES and TCE are working with the Texas Water Resources Institute and other partners to develop and implement comprehensive research, outreach, and extension programs. Common goals of these programs include the following:

- Ensure that water supplies are used efficiently in agriculture production, landscape maintenance, in the home, and in other settings.
- Protect water quality by preventing contamination in a number of settings, including agricultural practices, the operations and maintenance of on-site wastewater treatment systems, landscape and turfgrass maintenance, and the use and disposal of household chemicals.
- Identify opportunities to develop alternative, untapped, sources of water, including extensive efforts in water conservation, rainwater harvesting, water reclamation, wastewater reuse, the efficient removal of contaminants from saline, brackish and mineralized waters, and recovery of brines resulting from oil and gas operations.
- Bring timely information about critical issues to water resources managers, policy makers, and the public, including such topics as water resources, water marketing, groundwater management, storm water management, and new governmental regulations and programs that affect water resources management.
- Promote widespread education programs directed at school children and adults, including efforts touching on such issues as water resources management, drinking water quality, and environmentally-friendly methods to maintain landscapes, and ways to achieve water conservation in the home and on the farm.

The Water Management program supports the TAES Science Roadmap goals to sustain healthy ecosystems and conserve our natural resources and enhance competitiveness and prosperity of urban and rural agricultural industries. This program supports TCE Extension Roadmap goals to enhance natural resource conservation and management and ensure a sustainable, profitable, and competitive food and fiber system for Texas.

3. Program existence : Mature (More than five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)**1. Program Knowledge Areas and Percentage**

- 111 50% Conservation and Efficient Use of Water
- 112 50% Watershed Protection and Management

V(C). Planned Program (Situation and Scope)**1. Situation and priorities**

Water resources utilized to meet our water demand are mainly stored in surface reservoirs and aquifers. Texans currently utilize 17.4 million acre feet per year (AFY) from a total supply of 29.8 million AFY. Population growth, water infrastructure and aquifer mining will limit the ability to meet future water demands. Water conservation, water reclamation, rainwater harvesting, and saline, brackish, mineralized and impaired water source development is needed to meet our long-term water supply. Water quality best management practices are needed to reduce contaminant loading to our water resources to maintain the high quality of our fresh water supplies. Balancing the water demands for meeting human needs coupled with economic development must be balanced with the environmental flows required for healthy ecosystems. Strong research and Extension programs are needed to develop and disseminate information regarding best management practices capable of protecting and utilizing available water resources to meet long-term needs.

2. Scope of the Program

- Multistate Research
- In-State Research
- Integrated Research and Extension
- Multistate Integrated Research and Extension
- In-State Extension
- Multistate Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The water management program assumptions include: (1) continued funding for maintaining a critical mass of water faculty; (2) development of targeted initiatives evaluating best management practices to limit contaminate loading from agricultural production systems, residuals processing operations, landscape systems, wastewater infrastructure, storm water, and urbanized areas; (3) development of targeted initiatives evaluating methods to efficiently utilize water resources, capture alternative supplies, and remove contaminants from sewage, storm, saline, brackish, mineralized and brine water sources; (4) implementation of targeted educational programs increasing knowledge regarding efficient use of water resources, rainwater harvesting, water reclamation, wastewater reuse, and contaminant removal; and (5) implementation of targeted educational programs to increase knowledge regarding the utilization of best management practices to limit contaminant loading to our water resources and enhancing watershed stewardship.

2. Ultimate goal(s) of this Program

Landowners, agricultural producers, homeowners, communities and water resource managers will understand and adopt best management practices to protect water quality, enhance water conservation, and utilization of alternative supplies in order that water supplies will meet future water needs, essential for expanding agricultural growth, jobs, and the economy in both rural and urban areas.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Extension		Research	
	1862	1890	1862	1890
2008	27.1	0.0	16.0	0.0
2009	27.1	0.0	16.0	0.0
2010	27.1	0.0	16.0	0.0
2011	27.1	0.0	16.0	0.0
2012	27.1	0.0	16.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Publish research findings generated through evaluation of best management practices to efficiently manage available water resources, to limit off-site contaminant transport from production, processing, and landscaping systems, to utilize alternative water sources and to remove contaminants from impaired/alternative water sources.

Develop and conduct research and educational programs utilizing direct and indirect educational methods to support efficient utilization and conservation of water resources, to develop alternative water supplies, to implement best management practices on agricultural production and landscapes to protect water resources from contaminants, to promote proper management of surface and ground water resources, to enhance rainwater harvesting and to remove contaminants from impaired water supplies.

The work of the Texas Agricultural Experiment Station and Texas Cooperative Extension is conducted jointly where research-based information is generated and then transferred to clientele.

Continue development of educational resources such as articles, fact sheets, bulletins, curriculum materials, short course

manuals and other teaching materials.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension	
Direct Methods	Indirect Methods
<ul style="list-style-type: none"> ● Demonstrations ● One-on-One Intervention ● Workshop ● Education Class 	<ul style="list-style-type: none"> ● Web sites ● Newsletters

3. Description of targeted audience

Programs focusing on the issue of Water addresses target audiences including but not limited to producers, homeowners, landscape managers, industry practitioners, water resource managers, and others who identify themselves with this issue.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2008	7500	42000	4500	0
2009	7500	42000	4500	0
2010	7500	42000	4500	0
2011	7500	42000	4500	0
2012	7500	42000	4500	0

2. (Standard Research Target) Number of Patents

Expected Patents

2008 : 1 2009 : 0 2010 : 1 2011 : 1 2012 : 0

3. Expected Peer Review Publications

Year	Research Target	Extension Target
2008	165	0
2009	165	0
2010	165	0
2011	165	0
2012	165	0

V(H). State Defined Outputs

1. Output Target

- The number of group educational sessions conducted on water issues.

2008 :350 2009 :350 2010 : 350 2011 :350 2012 :350

- # research-related projects.

2008 :53 2009 :53 2010 : 53 2011 :53 2012 :53

V(I). State Defined Outcome

1. Outcome Target

% of participants who report an increased knowledge of best management practices related to water mangement.

2. Outcome Type : Change in Knowledge Outcome Measure

2008 :55 2009 : 55 2010 : 55 2011 :55 2012 : 55

3. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management

1. Outcome Target

% of participants who report the plan to or have adopted best management practices related to water management.

2. Outcome Type : Change in Action Outcome Measure

2008 :20 2009 : 20 2010 : 20 2011 :20 2012 : 20

3. Associated Knowledge Area(s)

- 111 - Conservation and Efficient Use of Water
- 112 - Watershed Protection and Management

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Other (Other Program Areas)
- Natural Disasters (drought,weather extremes,etc.)
- Public Policy changes
- Economy

Description

The factors listed above could have either positive or negative effects on the Water Management Program. The issue of water is of such an inter-disciplinary nature that effects of external factors related to other program areas could also have an impact on water.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Other (Anecdotal)
- Case Study

Description

Participants in selected programming activities will be administered a Retrospective-Post Test immediately after an educational activity. The issue-based questions will record the knowledge/awareness of the participants before and after the activity.

Case studies will be implemented to evaluate the effectiveness of specific educational programs at reaching their target audience.

2. Data Collection Methods

- On-Site
- Whole population
- Other (Web-Based Surveys)
- Sampling
- Observation
- Mail
- Case Study

Description

Multiple data collection methods may be used to gather information about this program.