V(A). Planned Program (Summary)

Program # 2

1. Name of the Planned Program

Youth/Adult Obesity

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
701	Nutrient Composition of Food	10%		10%	
702	Requirements and Function of Nutrients and Other Food Components	10%		10%	
703	Nutrition Education and Behavior	25%		25%	
704	Nutrition and Hunger in the Population	15%		15%	
724	Healthy Lifestyle	40%		40%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890
Plan	6.0	0.0	5.0	0.0
Actual	30.0	0.0	5.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	**1890 Extension**	**Hatch**	**Evans-Allen**
679733	0	143691	0
1862 Matching	**1890 Matching**	**1862 Matching**	**1890 Matching**
1587707	0	1026378	0
1862 All Other	**1890 All Other**	**1862 All Other**	**1890 All Other**
438905	0	1386536	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

- To identify the factors that promote excessive weight gain as well as protect against childhood obesity
- Measure how children born small for age are different with respect to body composition and risk for diabetes prior to developing diabetes or obesity.
- Investigate how perilipin A works in adipocytes to control fat storage and fat breakdown.
- Collect and analyze data on obesity-related measures (i.e., BMI) in adults and children
- Examine how weight loss affects calcium absorption and bone mass
- Create a multidisciplinary program comprising of faculty, staff, the medical community, industry partners and government officials
- Conduct adult/youth education and deliver targeted messages on healthy food choices and increased physical activity education using the following strategies:

Direct Methods:

- Educate Youth
- Educate Parents
- Educate Volunteers
- Food and Fitness Ambassadors
- Educate Child Health Summit Professionals
- Educate Teachers/School Nurses
- Educate Communities

Indirect Methods:

- Website
- Social Marketing

2. Brief description of the target audience

- Clinicians, Physicians and Nurses
- Health Care Professionals
- Hospitals (including teaching hospitals)
- Staff and students who gain valuable scientific experience
- Industry partners that benefit from fundamental and applied research in obesity and related chronic diseases
- Communities that benefit from increased knowledge about the mechanisms involved in obesity
- Other faculty and staff working on similar research
- Health-related organizations and foundations interested in obesity/nutrition issues
- School Age Youth
- Teens
- Teachers
- After School Providers
- Parents
- Volunteers
- Extension Professionals
- State and County Agencies and Organizations
- Schools

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	4500	22000	2500	2000
Actual	20641	16404	2134	2134

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2010
Plan: 0
Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Plan	6	22	
Actual	26	37	63

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- A variety of strategies will be implemented to reach target audiences. This will include and not be limited to workshops, field visits, classes, newsletters, media releases, electronic communications,publications. In addition a trained volunteer teaching base will be developed. Quantitative reports of participation will be collected
Not reporting on this Output for this Annual Report

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Short Term - Individuals gain awareness, knowledge, skills related to: Attitudes about healthy eating for adults/youth. Healthy food choices for adults/youth. Selection of healthy foods for adults/youth. Benefits of physical activity (reduced overweight and obesity, reduced risk of diabetes, heart disease and cancer.) Physical activity recommendations for health for adults/youth. Identify factors that promote excessive weight gain and protect against childhood obesity. Understand the molecular mechanisms of lipid transport in the intestinal cell. Demonstrate the affects on calcium absorbtion and bone mass by weight loss
2	Medium Term - Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.
3	Long Term - Individuals experience: Decreased overweight and obesity for youth/adults. Decreased risk factors for nutrition-related health problems and chronic diseases that are affected by diet and physical activity for youth/adults. A clear and comprehensive understanding of the genetic and physiological mechanisms of obesity and related chronic diseases. Pharmacological and/or medical treatments to alleviate the effects of obesity and related diseases.
4	Medium Term - Healthy Teen Expo: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.
5	Medium Term - Health Finance Education: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.
6	Medium Term - Promoting Healthful Eating to Prevent Excessive Weight in Young Adults: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased

	participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.
7	Medium Term - Instrumental and Sensory Characteristics of Nutritionally Improved School Meals: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.
8	Medium Term - Aspartame Impact: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.

Outcome #1

1. **Outcome Measures**

Short Term - Individuals gain awareness, knowledge, skills related to: Attitudes about healthy eating for adults/youth. Healthy food choices for adults/youth. Selection of healthy foods for adults/youth. Benefits of physical activity (reduced overweight and obesity, reduced risk of diabetes, heart disease and cancer.) Physical activity recommendations for health for adults/youth. Identify factors that promote excessive weight gain and protect against childhood obesity. Understand the molecular mechanisms of lipid transport in the intestinal cell. Demonstrate the affects on calcium absorbtion and bone mass by weight loss

Not Reporting on this Outcome Measure

Outcome #2

1. **Outcome Measures**

Medium Term - Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much

energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	14500	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Diabetes Caregiver Training Program

Diabetes presents a serious life challenge to both the individuals directly affected by this disease, as well as the caregivers, family members, coworkers, and others who live, work, or otherwise support the activities of daily living of people with diabetes.

What has been done
In 2010 3 different organizations participated in training sessions. Key content areas reflect information/skills pertinent to consumer decision making for better health outcomes with diabetes, including separating myths from facts about diabetes, preventing hypoglycemia (low blood glucose), understanding the role of food on blood glucose levels, and identifying strategies to eat healthier and to be more physically active.

Results
Improved nutrition/physical activity practices, better supporting diabetes management, and improved practices for social services agencies serving people at risk/diagnosed with diabetes: At follow-up, 93% of respondents ranked the program as very valuable or valuable 83% reported being able to use the information in some way, and an additional 13% planned to.
Specifically:
98% were planning/preparing healthier meals/snacks
90% of participants reported a better understanding of the issues of living with diabetes
94% reported feeling more confident in helping themselves or others live better with diabetes
94% reported being more aware of personal risk factors for diabetes
94% reported being more prepared to prevent/recognize/treat hypoglycemia
93% reported using a food label to identify nutrients in foods
85% were able to locate/use reliable resources on diabetes
Staff participation in this training has led to successful and continued re-licensing of a participating social services organization, due to improved education and skills in client nutrition

management. Training is now mandatory and conducted bi-annually for all new group home staff.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

Outcome #3

1. Outcome Measures

Long Term - Individuals experience: Decreased overweight and obesity for youth/adults. Decreased risk factors for nutrition-related health problems and chronic diseases that are affected by diet and physical activity for youth/adults. A clear and comprehensive understanding of the genetic and physiological mechanisms of obesity and related chronic diseases. Pharmacological and/or medical treatments to alleviate the effects of obesity and related diseases.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	19000	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
{No Data Entered}

What has been done
{No Data Entered}

Results
{No Data Entered}

4. Associated Knowledge Areas

KA Code	Knowledge Area
703	Nutrition Education and Behavior
724	Healthy Lifestyle

Outcome #4

1. Outcome Measures

Medium Term - Healthy Teen Expo: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Healthy Teen Expo

According to the Centers for Disease Control (CDC), more than one third of U.S. adults, more than 72 million people, and 17% of children are obese. From 1980 through 2008, obesity rates for adults have doubled and rates for children have tripled. The health consequences of obesity are numerous, including heart disease, Type 2 diabetes, various cancers, high blood pressure, high cholesterol and other conditions.

What has been done
The Healthy Teen Expo is a highly interactive wellness event that engages middle and high school students in a school-based event that takes existing knowledge of healthy lifestyle and

physical activity and improves the retention of learning after the event. The goal is for students to live longer, healthier lives by understanding the importance of proper nutrition and physical activity, learning ways to make healthy eating and physical activity a part of their daily lives, changing eating habits by making healthy food choices, and including physical activity in their daily lives.

Results

Follow-up results revealed the following changes in behavior:

35% eat more meals with the family
45% increased consumption of fruits and vegetables
33% controlled portion sizes
59% increased physical activity to 60 minutes per day
50% decreased screen time on TV/computers/video games
46% decreased consumption of sugar-sweetened beverages
25% read nutrition fact labels for serving size or calorie information

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

Outcome #5

1. Outcome Measures

Medium Term - Health Finance Education: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Health Finance Education

With passage of a new health care law and high unemployment rates during 2010, much attention was paid to health and personal finances and relationships between both aspects of people's lives. Major societal problems that have been widely reported in recent years include an increasing incidence of diabetes, more overweight and obese adults and children, low household savings rates, and high household debt and bankruptcy rates.

What has been done
An NJAES Specialist provides national leadership to Small Steps to Health and Wealth (SSHW), a national Cooperative Extension program that integrates health and personal finance subject matter and encourages participants to simultaneously improve both aspects of their lives. The target audience for SSHW and its associated Small Steps to Health and Wealth (SSHW) Challenge is persons age 25 to 65. Program outputs during the past year include new archived monthly health and financial messages on the SSHW web page, http://njaes.rutgers.edu/sshw/, and continued capacity building training for Cooperative Extension staff nationwide including SSHW Webinars for two national professional organizations.

Results
In 2010, steps were taken to position Small Steps to Health and Wealth (SSHW) as a "signature" program of NIFA, USDA. Three five- or six-week competitive online SSHW Challenges were held in 2010. Survey findings indicated that the online SSHW challenge fostered positive health and financial behavior changes with the following results reported in the three challenges: Eat healthier foods (60%, 68%, 71%), Increased physical activity (40%, 46%, 86%), Improved spending habits (36%, 47%, 57%), Lost weight (13%, 33%, 43%), and Saved money (27%, 47%, 71%).

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

Outcome #6

1. Outcome Measures

Medium Term - Promoting Healthful Eating to Prevent Excessive Weight in Young Adults: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Promoting Healthful Eating to Prevent Excessive Weight in Young Adults

The obesity epidemic impacts young adults and the rates of obesity are extremely high in New Jersey. Interventions may impact weight gain for 18-24 year old population.

What has been done
A multi-state community based participatory research project guided by the PRECEDE-PROCEED model involved the community directly in the research process to help the community gain awareness of, and interest in the issues that must be addressed to successfully prevent obesity in young adults. A 10-week online intervention (Young Adults Eating and Active for Health [Y.E.A.H] project trained 10 undergraduate research assistants to conduct anthropometric (height, weight, waist circumference), blood pressure, and biochemical measurements (blood glucose and lipids).

Results
The Y.E.A.H. project is the first to systematically develop and test a tailored, web-based program to prevent excessive weight gain in the 18-24 year old population using the community

based research process of PRECEDE-PROCEED. Results of the pilot test indicate that this intervention is on track to promote healthy weights in the target population. Involving the community directly in the assessment of the physical environment in terms of how it advocates and supports physical activity, consumption of healthful foods, and overall health helps the community gain awareness of an interest in the issues that must be addressed to prevent obesity in young adults.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

Outcome #7

1. Outcome Measures

Medium Term - Instrumental and Sensory Characteristics of Nutritionally Improved School Meals: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Instrumental and Sensory Characteristics of Nutritionally Improved School Meals

In New Jersey 31% of youth ages 10-17 are considered overweight or obese and 35% of younger children age 3-5 are considered obese. These rates are unacceptably high and a very serious problem.

What has been done

NJAES researchers have shared project results with the staff of New Jersey Child Nutrition Bureau and New Jersey Food Distribution Program. Presented information provided scientific support to help in the implementation of new State and Federal guidelines counteracting growing rate of obesity among children and adolescents. Researchers also evaluated and compared the quality of the selected traditional and nutritionally improved school lunch products.

Results

The results of this research contributed to the efforts to improve eating and nutritional quality of over 500,000 school lunches served daily in New Jersey. The findings of this project were made available to the local New Jersey food processors to help them meet new quality requirements for school meals. These results provide scientific basis that will contribute to the actions of government agencies and food processors in the implementation of new nutritional standards and requirements.

4. Associated Knowledge Areas

KA Code	Knowledge Area
701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

Outcome #8

1. Outcome Measures

Medium Term - Aspartame Impact: Individuals incorporate skills/change behaviors related to: Increased adoption of healthy food practices. Increased consumption of fruits, vegetables, whole grains and low-fat dairy. Increased participation in family meals. Increased participation in physical activity. Increased participation in family-related physical activity. Increased use of new 'campaign' website. Improved understanding of the relationship between early nutrition and later risk for chronic disease. Understanding the process by which perilipins at the surface of lipid droplets control how much energy is released from the adipocyte at times of need. Understanding how the intestines and body uptake and process dairy fat. Identify genes, their protein product and how the proteins influence the way the body processes fat.

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Action Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2010	{No Data Entered}	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)
Aspartame Impact

Nationally, obesity is at epidemic levels. In an effort to combat obesity consumers are turning to non-nutritive sweetness such as aspartame, which is added to diet sodas and food products.

What has been done
Over the last few years, NJAES researchers have been examining the effects of aspartame, a widely-used sugar substitute, in rats given a junk-food diet. As expected, rats on a junk food diet gain more weight that rats fed Purina rat chow. The data thus far suggest that aspartame prevents weight gain when a low-calorie, healthy diet is eaten, but promotes weight gain when an unhealthy, high-calorie diet is consumed.

Results
Results to date also indicate that aspartame increases cravings for carbohydrates and fats but decreases cravings for sugar. Another focus of this research is on long-term effects of aspartame in tissues of animals fed a junk food diet. Very few long-term aspartame studies exist to demonstrate the compound's effects. Aspartame is known to be completely metabolized in the gut and absorbed as phenylalanine (50%), aspartatic acid (40%), and methanol (10%). Methanol is converted in the body to formate, which can either be excreted or produce byproducts like formaldehyde, diketopiperazine (a carcinogen), and a number of other highly toxic derivatives. Therefore, it is possible that long-term accumulation of aspartame byproducts may cause changes in tissue morphology. An evaluation of the slides indicates that the rats that drank the aspartame solution were more prone to tubular proteinosis in the kidneys and fatty degeneration in the liver. This data suggest that long-term ingestion of aspartame may result in kidney and liver pathologies. These preliminary laboratory-based findings raise some troubling questions about the longer-term potential health impacts of aspartame, which is the primary non-nutritive sweetener in diet soda and a common additive in many individuals? diets. Certainly, more research is needed to determine confirm these results in the laboratory and to explore the implications for human consumption of aspartame.

4. Associated Knowledge Areas

KA Code	Knowledge Area

701	Nutrient Composition of Food
702	Requirements and Function of Nutrients and Other Food Components
703	Nutrition Education and Behavior
704	Nutrition and Hunger in the Population
724	Healthy Lifestyle

V(H). Planned Program (External Factors)

External factors which affected outcomes

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

Brief Explanation

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

1. Evaluation Studies Planned

- After Only (post program)
- Retrospective (post program)
- Before-After (before and after program)
- Time series (multiple points before and after program)
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Comparisons between different groups of individuals or program participants experiencing different levels of progra intensity.
- Comparison between locales where the program operates and sites without program intervention

Evaluation Results

See Qualitative or Impact Statements

Key Items of Evaluation