IMPACTS OF THE CONSERVATION RESERVE PROGRAM DECISION ON THE TEXAS PANHANDLE

A Senior Thesis

By

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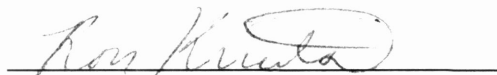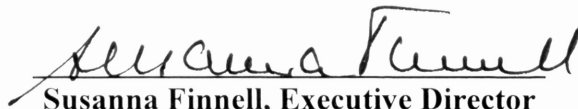# IMPACTS OF THE CONSERVATION RESERVE PROGRAM DECISION ON THE TEXAS PANHANDLE

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Abstract

Impacts of the Conservation Reserve Program Decision on the Texas Panhandle

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The following is an attempt to measure the economic effects of bringing CRP land back into production in the Texas Panhandle. I will focus on 60 counties within this region. In the research, I have used an input-output model in an attempt to duplicate the effects of bringing once idled CRP land back into production. This was done in an attempt to quantify the effects to farmers, as well as to agribusiness and consumers in the region. The study performed here had not been previously done by other researchers in the field, so the question of economic impact to the area is a major concern. The model measures the output and employment resulting from putting the land back into production. These variables allow an accurate evaluation of the impact resulting from returning CRP land to production. While the study has some inherent weaknesses, it appears to be a reasonably accurate assessment of the impacts on the Texas Panhandle.

Impacts of the Conservation Reserve Program Decision on the Texas Panhandle

Chapter 1- The Conservation Reserve Program

Introduction

The Great Plains represents one-third of the total crop production in the United States (294 million metric tons). Of the ten Great Plains states, Texas holds a significant proportion of the land that is used to grow crops, on which it produces 12.4 MMT of the crops produced in the region. The Conservation Reserve Program (CRP) affects the entire country, however, it has a particularly strong impact on the Great Plains. Of the 36.4 million acres of CRP land, 60 percent is located in the Great Plains. The 1996 Farm Bill, while reauthorizing CRP, changed the focus in terms of the types of land bid into the program. This study focuses on the economic effects the new CRP program.

The original purpose of CRP was to take highly erodible land out of production for a period of ten years. Farmers who did this were compensated for putting their land in the program. They were paid a rental rate based on the farmer's bid which, under the new program, could be no higher than the average rental rate in their county.

Since the original inception of the program, the eligibility requirements to enter the program have changed significantly. The 1996 Farm Bill has led to some major changes in U.S. farm programs, including CRP. Base acreage was eliminated, and, with some limitations, farmers now may plant any crop they desire. This has led to a great deal of uncertainty, especially for agribusiness firms. Now, chemical companies are not

sure what farmers will produce which makes it very hard for them to know what chemicals farmers will demand.

Farmers moved from target prices to fixed payments under the Fair Act (Freedom to Farm Act). In fact, this program is scheduled to be eliminated in 2002 which could mean even more volatility in farm incomes. The 1996 Farm Bill is moving toward more market-oriented agriculture. Farmers are no longer just competing with farmers in the U.S., but now they must worry about farmers in the European Union, and other international markets as well. The competition becomes even more heated when another country heavily subsidizes its agricultural production, while the United States is trying to move away from direct government support. The World Trade Organization (WTO), formerly the General Agreement on Tariffs and Trade (GATT), is trying to alleviate this problem by negotiating the elimination of all subsidies world-wide, but it is not close to reaching a final resolution.

Farmers whose land was not selected for CRP are very angry over the decision. This sign-up really emphasized a switch from the focus being highly erodible land to land that is sensitive toward water quality issues. This has made farmers in some states very angry. The two loudest of these states are Washington and Texas. Both states had a lot of acreage come out of the program as a result of the change in focus. In fact, Washington had 612,839 acres come out as a result of the 15th sign-up, and Texas had even more come out with 1,019,036 acres coming out of the program, and less than half of the acres bid into the program were accepted. Did these states get a rotten deal, or not? This remains to be seen, although if you ask people in Washington and Texas, they will tell you that they got the raw end of the deal. The only winners that were evident in this

new sign-up were North and South Dakota, especially North Dakota. Both of these states are located in the Prairie Pothole which is a Conservation Priority Area. This verifies that the program is moving toward an emphasis on water quality.

With all the problems farmers are facing in the market, the new requirements on CRP create even greater uncertainty. It is more difficult for farmers to decide whether to stay in the program. All these changes are leaving many farmers with less productive land few options for their land.

Farmers who were not enrolled are having to put their land back into production or even sell it to be able to maintain their living. However, the farmers are not the only ones affected by CRP. With CRP, consumers are facing higher food prices, and agribusiness firms experience less sales of farm supplies and machinery. This thesis examines the economic effects of the changes in CRP on Texas, especially those counties in the Panhandle, that are impacted the most.

The Problem

The Conservation Reserve Program has been around in some form or another since 1956. The forerunner of CRP was the Soil Bank Program authorized in the 1956 Farm Bill. It was allowed to expire because of tighter food supplies which culminated in the world food crisis during the early 1970's (Knutson, Penn, and Flinchbaugh). When surpluses redeveloped in the early 1980s, CRP was reauthorized in the 1985 Farm Bill with support from both farmer and environmental interests.

CRP was designed to be a long-term program removing eligible land for 10 years. Annual rental payments were made to farmers who bid to put their land in the program.

Since its inception, farmers have had sixteen opportunities to bid their land into CRP, two under the 1996 Farm Bill.

The primary objective of CRP as indicated by the 1985 Farm Bill was to remove up to 45 million acres of highly erodible cropland from production. Since then, budget and food supply/demand balance issues have limited enrolled acres to 36.4 million.

Since the CRP was first put into the 1985 Farm Bill, there have been some dramatic changes. Originally, CRP land had to be just highly erodible. It was not taken into account whether the land was subject to wind or water erosion. All that really mattered was that the land have an Erosion Index of at least 8. Since the inception of CRP as authorized in the 1985 Farm Bill, there have been 16 sign-ups for CRP.

In 1990, legislation was amended to emphasize land with wildlife, water, and other environmentally sensitive problems such as wetlands. The 1996 Farm Bill continued this orientation by giving preference to land that was water quality sensitive. One possible motivation was to cutback the number of acres going into the program. Congress was pushing for budget cutbacks. One of the first sectors targeted was agriculture. One motivation for this was the supply-demand balance of food stocks. Another motivation was that agriculture is now the largest source of water pollution (Knutson, Penn, and Flinchbaugh).

To get into the Conservation Reserve Program, a farmer offers a bid for the rental rate on the land desired to be enrolled. Utilizing the eligibility criteria to get into the program, found in the next section, and the bid, offers for CRP contracts are then ranked by the Natural Resources Conservation Service (NRCS) and USDA according to the Environmental Benefits Index (EBI). The NRCS collects data for each EBI factor on the

land offered. Each offer is assigned a point score based upon the relative environmental benefits of the bid. Offers are then ranked in comparison to all other offers nationally and selections are made from that ranking, starting with the top ranked offers. EBI factors include: wildlife habitat benefits resulting from covers on contract acreage; water quality benefits from reduced erosion, runoff, and leaching; on-farm benefits of reduced erosion; likely long-term benefits beyond the contract period from certain practices such as tree plantings; air quality benefits from reduced wind erosion; benefits of enrollment in conservation priority areas where enrollment would contribute to the improvement of identified adverse water quality, wildlife habitat, or air quality; and cost.

As a result of the policy change favoring water quality, over a million acres have come out of the program with only a fraction of that number being accepted into the program. Since the 10th sign-up, the program has shifted to achieve environmental benefits such as wildlife habitat, improved water quality and erosion control. This means changes in EBI. The EBI is a system for comparing different environmental benefits and ranking offers according to the greatest benefits realized per tax dollar (Conservation Reserve Program Environmental Benefit Index Fact Sheet). In order to be eligible for CRP, land was required to be:

1. Cropland that is planted or considered planted to an agricultural commodity 2 of the 5 most recent crop years which is also physically and legally capable of being planted in a normal manner to an agricultural commodity

2. Marginal pasture land that is either:

   - a. Certain acreage enrolled in the Water Bank Program

- b. Suitable for use as a riparian buffer to be planted to trees.

In addition to these requirements, **cropland** must:

1. Have an Erosion Index of 8 or higher or be considered highly erodible land according to the conservation compliance provisions

2. Be considered a cropped wetland

3. Be devoted to any number of highly beneficial environmental practices, such as filter strips, riparian buffers, grass waterways, shelter belts, well-head protection areas, and other similar practices

4. Be subject to scour erosion

5. Be located in a national or state CRP conservation priority area

6. Be cropland associated with surrounding non-cropped wetlands.

Land previously enrolled in CRP could be re-enrolled if the bid was competitive, and it met these requirements.

The following revisions and enhancements were added to the EBI to make it more effective in the 16th sign-up. The changes include:

- Increased emphasis on vegetative covers for the benefit of wildlife;

- Recognition of cultural resource areas such as historic sites and certain tribal lands;

- A revised air quality factor to better reflect the improvements to air quality based on reductions in wind blown soils, including volcanic soils and those contributing to "PM-10 non-attainment" areas;

- Encouraging competitiveness by adding credit for farmers and ranchers willing to bid less than the maximum amount that the Government is willing to pay.

The calculation for EBI is based upon seven factors. These factors include:

1. **Wildlife habitat cover (N1)**

2. **Water quality benefits (N2)**

3. **On-farm benefits of reduced erosion (N3)**

4. **Enduring benefits (N4)**

5. **Air quality benefits (N5)**

6. **Benefits of enrollment in a Conservation Priority Area (N6)**

7. **Cost (N7)**

The EBI score is the sum of these factors. Each of the above factors carries a different weight. For instance, some of the factors are worth up to 100 points while others are only worth up to 35 points. Each of the aforementioned factors is not scored based on just one variable. Actually, they are made up of several variables, each carrying a different weight that determine the overall score of the factor. For example, Wildlife Cover (N1) is made up of 6 different variables. These include: N1a - Wildlife Cover (0-50 points); N1b - Federal/State Threatened and Endangered Species (0-15 points); N1c - Proximity to water (0, 5, or 10 points); N1d - Adjacent to protected areas (0, 5, or 10 points); N1e - Relative contract size (0, 2, or 5 points); and N1f - Restored cropped wetland to upland percentage (0, 1, 5, or 10 points). The Wildlife Cover variable carries a great deal of weight in this factor, so the Wildlife habitat cover factor is calculated by:

(N1a/50)*(N1a+N1b+N1c+N1d+N1e+N1f).

The other factors are determined in a similar fashion, although not all factors have unequally weighted variables, as in the above case. Changes in the EBI between the 13th and 16th sign-up can be seen in Figure 1. While the point scores are worth more in the 16th sign-up, the first five factors are evenly weighted between the two sign-ups. Air quality benefits will make a big difference in the Panhandle because of the amount of wind erosion in the area, although these are rather small in comparison to water quality benefits, which does not apply as much to the study area. Benefits of enrollment in a Conservation Priority Area will be the factor that will cause a swing in CRP land away from the Panhandle. This region is not in a Conservation Priority Area, so it will receive 0 points for this factor. This will cause enough discrepancy from other areas where scores are higher.

The core of the Texas issue involves the emphasis of this new legislation on water quality while the big erosion problem in the Texas Panhandle is wind erosion. The combination of CRP and conservation compliance achieved the combined environmental objectives of curbing wind erosion and creating wildlife habitat. Release of CRP lands can be expected to result in many economic effects as well as increased wind erosion and reduced wildlife habitat. The 1996 Farm Bill has more potential implications for the Great Plains, including Texas, than previous legislation both because of the political uncertainty that surrounds it and because the economic conditions facing its producers-- particularly its wheat producers.

The changes in CRP are going to have profound effects on Texas in the short-run as well as the long-run. Texas land, according to the new EBI factors, is just not as

Figure 1 - Changes in the Environmental Benefits Index Factors

	13th Sign-up[1]	16th Sign-up[2]
Wildlife habitat cover	0-20 points	0-100 points
Water quality benefits	0-20 points	0-100 points
Erodibility Index	0-20 points	0-100 points
New tree Planting	0-10 points	
Enduring benefits		0-50 points
Air quality benefits		0-35 points
Benefits of enrollment in a Conservation Priority Area		0 or 25 points
Cost	to be determined	0-? Points

1. Source: U.S. Department of Agriculture, Consolidated Farm Service Agency, Preparation for CRP Sign-up 13, April 1, 1996
2. Source: U.S. Department of Agriculture, National Resources Conservation Service, Washington State, Conservation Reserve Program Environmental Benefit Index Fact Sheet, October 21, 1997

environmentally sensitive as land that is located in other states, especially land located in

conservation priority areas, like the Prairie Pothole Region. This means that a lot of

Texas land has come out of CRP. All these changes in the CRP program will have an

impact, not only on the farmers, but on agribusiness suppliers and marketing firms as

well. The economic impact these changes will have on the region must be considered.

Land coming out of CRP will have several options. These include:

1. producing crops with or without conservation compliance

2. grazing the land

3. producing forages

4. raising trees for timber, shelter belts, or wind breaks

5. developing the land for hunting and wildlife habitat

6. producing specialty crops.

These options allow the owner of the land several options when the land comes out of

CRP. However, uses such as grazing and hunting are lower value activities, so no matter

if the owner sells the land or rents out the land, the land is likely to be put back into

production according to the original crop base established on the land. Therefore, this

will be the focus of the study.

How these impacts will affect Texas and the Great Plains as a whole remains to be

seen. However, in Texas, there will be some big winners and some big losers. The

stakeholders in question include not only farmers, but consumers and agribusinesses as

well. In the Panhandle, agribusiness contributes more economically to the area than

farming, so it will be important to see how these firms fare in the aftermath of shifting

CRP acres back into production.

The Objective

The overall objective of this research was to evaluate the economic impacts of CRP enrollment decisions on the Texas Panhandle (Figure 2). Specific objectives include:

- To develop background on the legislative history of CRP that led to the Texas controversy.

- To analyze the consequences of CRP on economic activity in the study area.

The main hypothesis is that the CRP program changes have distinctly different economic impacts. Specifically:

- Paying farmers to take land out of production adversely impacts industries closely related to agriculture.

- These economic impacts are not made up for by direct rental payments from the government.

The Research Approach

The research approach used was as follows (Figure 3):

- Utilized the resources of the Internet, the congressional hearing record, and the Library of Congress to research the background for the CRP program.

Figure 2 - Researching the effects of CRP on the Texas Panhandle
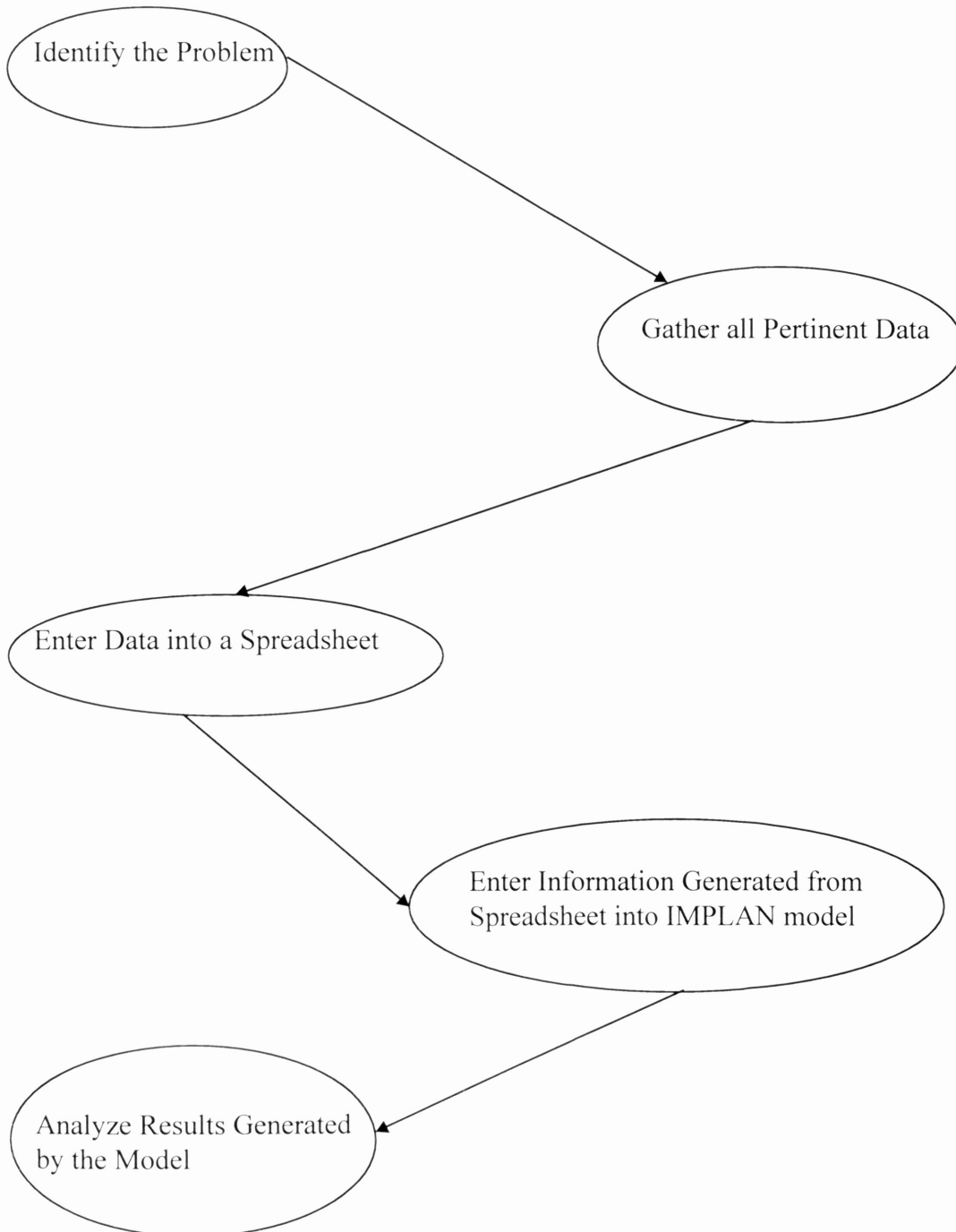
Figure 3 - How the IMPLAN Model Works
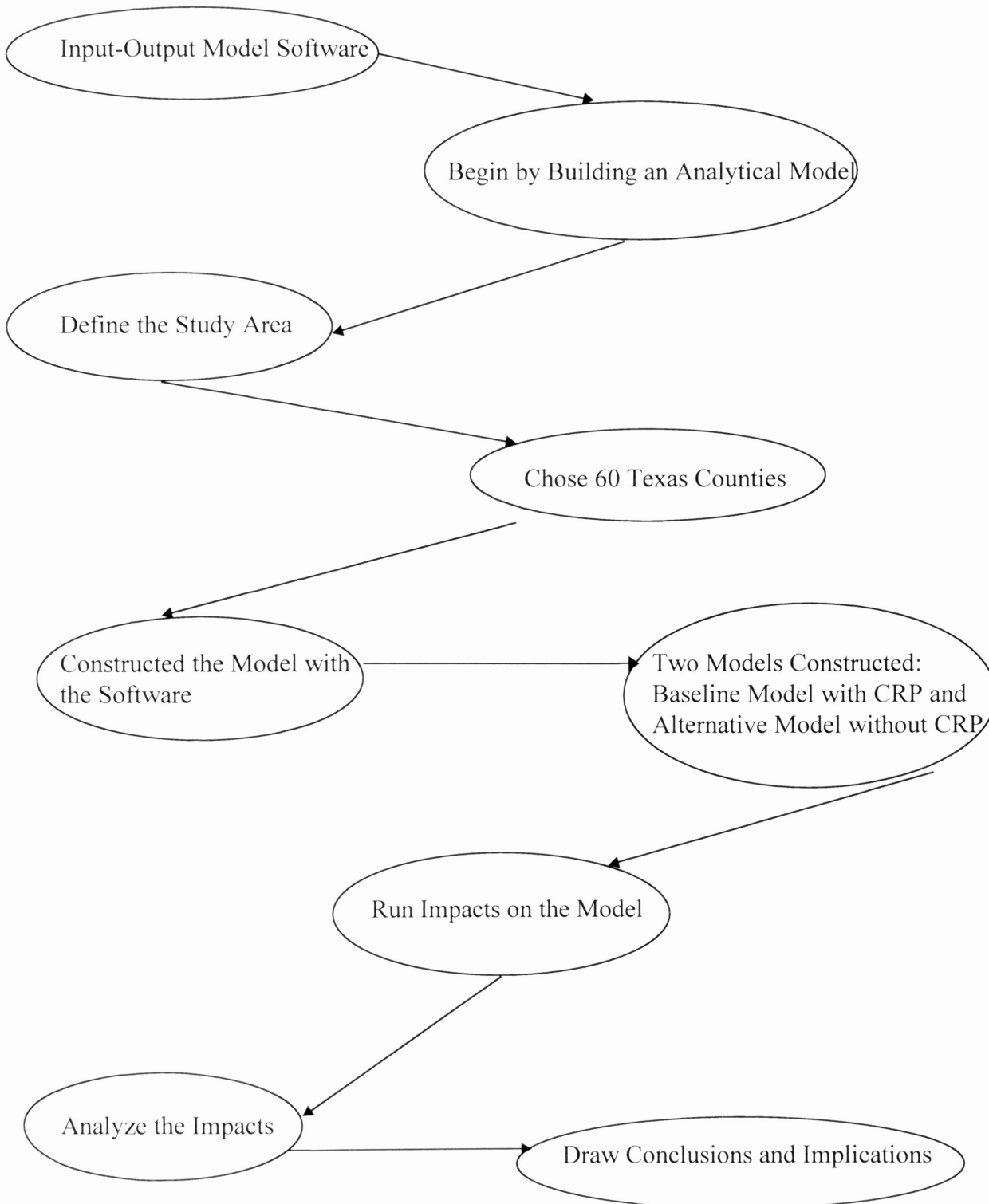
- Utilized a spreadsheet of CRP enrollment by state, by region, and by crop to organize data for the analysis of CRP consequences. IMPLAN, an input-output model, was then utilized to evaluate the economic impacts of changes in CRP enrollment.

The main resources used included a computer that provided Internet access. The data required was obtained from secondary sources (NRCS/USDA). The input-output model (IMPLAN) is a software package. For the input-output model, a two day training was received in Stillwater, Minnesota. The training provided the necessary information on how to use the software, as well as gave instructions on how to interpret the results of the impacts run on the data.

To be able to study the impacts of bringing CRP land back into production, it was necessary to find data on the sixty counties in the study area. Research was done on each county to determine:

- the base acres, as of 1995, for wheat, cotton, corn, sorghum, barley, and oats

- the number of acres currently enrolled in CRP

- the county rental rate

- the county yields for each crop

- the actual production of each crop

- an average price for the commodity for the 1995 production year.

To be able to use the IMPLAN Model, it was necessary to make several calculations for each of the six commodities using this data. One calculation made was the amount of CRP payments for each county. This was done by multiplying the number of acres in

CRP by the county rental rate. A second calculation performed was to determine the level of actual production in the county in terms of dollars. This was done by multiplying the actual production by the average price of the commodity. A revenue for the baseline scenario, keeping the land in CRP, was obtained by summing the CRP government payments and receipts from production. Receipts from production was added to the government payments to determine a revenue for the entire county; not all county land is enrolled in CRP.

For the second scenario, bringing the CRP land back into production, yield from the CRP acres, in terms of dollars, was added to actual production. Yield was determined by multiplying the acres in CRP of that particular base, according to the 1995 data, by the county yield for the commodity, then multiplying by an average price for the commodity. It was assumed that production yield on the CRP land would be the same as other cropland in production. Most likely, however, yield on this CRP land put back into production would be slightly less than the yield on land already in production. The basis for this reason is the fact that the land was considered environmentally sensitive enough to be a part of the Conservation Reserve Program at one time. The problem in determining the yield on the land is that the yield would not decline by a certain percentage on all acres in question. This is the reason the 1995 yield was used in determining the amount of production that would have occurred on CRP land. This gave the revenue received from putting the acres back into production.

To run the impacts in the IMPLAN Model, county revenues were summed to find the total revenue generated. Also, commodities were separated based on their classification in the model. In respect to this, wheat was classified as a Food Grain;

sorghum, corn, barley, and oats were classified as Feed Grains; and cotton was classified as Cotton. This was required to be able to run impacts in the model.

Background on Texas Counties

For this research, 60 Texas counties, located in the Panhandle, have been chosen as a study area (Figure 4). These counties represent 88 percent of the CRP land located in Texas, or 3,177,170 acres. They also represent 54 percent of the total cropland in Texas, meaning that the Panhandle region is the largest contiguous crop producing area in Texas.

Most of the farmers located in this area are family farmers. The average size operation in the sixty counties is 1,830 acres. Some counties are characterized by much larger farms. For example, the average size farm in King county is 12,825 acres. Andrews county, Oldham county, and Roberts county are also higher than the average, ranging from 4,858 acres to 7,183 acres.

In 1995, the bulk of the cropland acres was in wheat (1,115,552 acres), cotton (1,106,530 acres), or sorghum (527,771.9 acres). This corresponded to the type of base established on the land. Most farms in the Panhandle have their base in wheat and cotton, hence the substantial amount of production of these two commodities that occurs in the region. While sorghum does account for a large portion of production acres, it lags far behind that of wheat and cotton.

There are very few major urban centers in this area. The counties are mainly located close to two centers, Lubbock and Amarillo. Agribusiness firms dealing with the region are located mainly in these two cities, so the effects of putting CRP land back into production will play a major role in the economies of these two cities.

Figure 4 - The 60 Panhandle Counties

DALLAM	SHERMAN	HANSFORD	OCHILTREE	LIPSCOMB
HARTLEY	MOORE	HUTCHINSON	ROBERTS	HEMPHILL
OLDHAM	POTTER	CARSON	GRAY	WHEELER
DEAF SMITH	RANDALL	ARMSTRONG	DONLEY	COLLINGSWORTH
PARMER	CASTRO	SWISHER	BRISCOE	HALL	CHILDRESS
BAILEY	LAMB	HALE	FLOYD	MOTLEY	COTTLE	HARDEMAN FOARD
COCHRAN	HOCKLEY	LUBBOCK	CROSBY	DICKENS	KING	KNOX
YOAKUM	TERRY	LYNN	GARZA	KENT	STONEWALL HASKELL
GAINES	DAWSON	BORDEN	SCURRY	FISHER	JONES
ANDREWS	MARTIN	HOWARD	MITCHELL	NOLAN	TAYLOR

Chapter 2-Overview of Previous Studies

Literature Review

This literature review will allow us to look at other studies that have been performed before regarding the Conservation Reserve Program. These studies allow us to see what issues have been studied in the past and the unique aspects of this research.

Knutson, Penn, and Flinchbaugh

Knutson, Penn, and Flinchbaugh indicated that rural communities, especially those located in high-participation areas, objected to the whole-farm retirement provisions of the Soil Bank Program (SBP). The SBP was the forerunner of the Conservation Reserve Program. The SBP retired both partial and whole farms. Local residents objected to the program because it reduced input purchases and product marketing. This undermined agribusiness, a main source of livelihood in those communities. They particularly objected to whole farm retirement because it resulted in people moving out of the area and taking their rental payments with them. While noting their economic effects, Knutson, Penn, and Flinchbaugh did not quantify the economic impacts on the communities.

As a result of the lessons learned from the Soil Bank Program, the CRP put a cap on annual payments to one person and also on the amount of land retired by any one county. The 1985 Farm Bill capped annual payments to one person at $50,000 and no county could retire more than 25 percent of their total cropland, unless it was determined that there would be no adverse effects, in which case 30 percent of the total cropland

could be retired. All this was done to reduce the consequences relating to land retirement for rural communities, as originally discovered in the soil bank program.

Johnson, Taylor, and Clark

Johnson, Taylor, and Clark of the Texas Agricultural Extension Service hypothesized the effects CRP would have on rural communities. They theorized that the net adverse economic impact on rural economies would be very small when viewed from a national perspective. However, different sectors within the rural economy were expected to experienced reduced economic activity because of CRP enrollment. The hardest hit of these would be the input suppliers and the handlers of agricultural commodities. These firms probably would not support policy alternatives which would compensate producers who maintain their cropland in conservation.

Outlaw

Outlaw, in a study of communities in the Texas Panhandle, found that in the 1970s, the rural communities were characterized by increased economic growth and vitality. However, this reversed in the early 1980s when rural communities experienced high unemployment rates, outmigration of youth, and declining asset values. One of the main causes for the decline in the rural community was the financial stress on U.S. farms caused by macroeconomic policies resulting in high interest rates, reduced exports resulting from a strong dollar, and increased foreign competition. The result was outmigration. In addition, he found that opportunities from agriculture were limited because of reduced production and low value-added activities. Outlaw did not

specifically study CRP. However, it is clear that CRP would have the effect of

aggravating the economic conditions documented by Outlaw.

Feist

In 1991, Feist in an economic development study found that the population in the

region studied was shifting to the urban areas. This rural outmigration seemed to be

increasing over the years. Fewer people results in reduced economic activity. With this

came more economic stress in the rural areas. These rural Panhandle communities were

falling far behind the urban centers, Lubbock and Amarillo, in terms of economic and

social composition. Thus rural areas became more specialized, emphasizing a certain

type of agriculture such as cattle feeding. However, these communities were becoming

more closely linked to national and global economies, making them more susceptible to

changes in macroeconomic policy, business cycles, and global competition. Once again,

the issues raised by CRP were not studied.

McClaskey

In 1995, McClaskey's thesis entitled *Agriculture and the Great Plains: The*

Impact of Changes in Agricultural Policy focused mainly on two farm programs, the

target price program and CRP. As suggested by the title, the study focused on the Great

Plains, which is a region that runs from its northern-most point in North Dakota to its

southern-most point in Texas. She found that agriculture in this region of the United

States was the most heavily subsidized by the government of all U.S. production areas.

Since the Great Plains are so highly dependent on farm subsidies, changes in any farm policies, such as target prices and CRP, will have a profound effect on the region.

As a result of its agriculture being relatively more important in a regional context and its sparse population, the agriculture sector results indicate that changes in agricultural policy profoundly affect the Great Plains. McClaskey found that CRP would result in a net farm income loss for the United States, so farm policymakers have a big decision to make on whether or not to continue CRP. The study also found that larger farms do better economically with or without CRP. Whatever the decisions made, continuation of CRP would allow farmers in the Great Plains to restructure, if necessary, or get out while they still have the option. Interestingly, McClaskey did not study the broader effects of CRP on economic activity in the region.

Taylor

Taylor performed a study of the economic effects of CRP land returning to production. He stipulated that CRP was not only a conservation program, there was also a supply control dimension to the program. Removing the land from production reduced the supply of crops. Returning this land to production would increase the supply of crops, which would depress crop prices but increase sales of commodities marketed and increase sales of farm inputs.

In his research, Taylor assumed that most CRP lands are in conserving uses more readily convertible to crop production and are not planted to trees. His model also assumed declining real target prices which would mean that the economic effects of the land coming back into production would depend more on prevailing market forces. In

fact, Taylor's assumption was right on target with what happened under the 1996 Farm Bill. Target prices have been done away with leaving farmers dependent on market forces. He also stressed the importance of looking at the longer term estimates because of the ability to better adjust over the long-run. He looked at both the demand and supply sides. 19.2 million acres were assumed to return to production.

Taylor's study found that crop and livestock prices would be negatively impacted by the return of CRP land to production. However, these negative impacts were expected to be much less over the period 2005-2008 relative to that of 2001-2004 because of the ability of the market to recover from the increase in the amount of productive land over the long-run. Conversely, consumers would be better off with the idled land coming back into production. Lower crop prices, and hence lower farm incomes, would mean lower food prices for consumers. In all, he found with reasonable certainty, taking into account the uncertainties of domestic and global economic conditions as well problems with weather and disease, that the effects on net farm income would be negative, ranging from $1.5-2.0 billion annually. The big winners in all this, domestic and foreign consumers.

Conclusion

While there has been substantial study of CRP and hypotheses concerning its effects, no one except Taylor has really studied the issue. Moreover, Taylor did not analyze the effects of CRP land coming back into production on a single area, rather he studied the entire United States. Also, his study was performed in 1994. This happened before all the changes to CRP were made and included in the 1996 Farm Bill. This also occurred before the WTO started heavily pushing for the elimination of all farm subsidies

throughout the world. Even though Taylor studied the economic impact of bringing CRP

land back into production, he was unable to predict how farm programs would change in

just two years. Lack of this knowledge may have prevented him from making accurate

assessments of the effect on net farm incomes.

Chapter 3 - Impact Analysis

Hypothesis

Land entering CRP is land that is highly erodible, as discussed in an earlier section. Taking this land out of production reduced the economic activity in the region by taking productive land out of production. While the land was not the most productive land in the region and arguably should not be used in crop production, more economic activity would have been generated by leaving the land in production rather than putting it into the program.

Assumptions

It is important to review the assumptions that were made for this study. A major assumption made was that CRP land coming back into production would have the same yield as other cropland. There are arguments for and against this. One argument says that the land could not be as productive as other cropland simply for the fact that the land in CRP was required to be highly erodible, so therefore it had to be less productive land. On the other hand, some argue that since the land was in CRP, it has had time to recover, to rebuild topsoil and needed nutrients in the soil. Moreover, land subject to wind erosion may be less inclined to be less productive than that subject to water erosion. These people argue that the land might even be more productive than other cropland that has remained in production for the ten years of the CRP contract.

It was also assumed that all of the CRP land came back into production, and it came back into its original base. For example, land that had wheat base until the 1996 Farm Bill came back as wheat, and so forth.

Another assumption was that if the land was used for hunting instead of crop production, hunting revenues were the same with CRP and without CRP. This is a fairly large assumption, however, it seems to be a fair assumption. The one problem with it is that added revenue that comes from hunting is unknown.

IMPLAN is assumed to capture all effects. Prices were assumed to remain at the 1995 level. This is inconsistent with the pre-1996 Farm Bill analysis of Taylor. To the extent that the 1996 Farm Bill opened up market forces on the supply and demand side of the market, the price effect of increased production could be reduced. Moreover, this analysis deals only with the Panhandle, which would have less effect on price than would the United States, as analyzed by Taylor.

IMPLAN Model

IMPLAN is an input-output model. Input-output analysis is a means of examining relationships within an economy both among businesses and between businesses and final consumers. The IMPLAN model is divided into 528 sectors. For the study, each of the six commodities were placed into the appropriate sector, and impacts were run on a sector basis. Cotton was placed in the Cotton sector (Sector 10), wheat in the Food Grains sector (Sector 11), and corn, sorghum, barley, and oats in the Feed Grains sector (Sector 12).

Economic Variables Measured

The output variables measured as indicative of the effects of CRP include productivity and employment. In the IMPLAN model, productivity, measured by the value of production by industry for a given time period, is measured across all sectors, not just agriculture or the specific commodities studied. The other variable is employment. Employment is measured as the total wage and salary employees and self-employed jobs generated in the region. It includes both full-time and part-time workers and is measured in total jobs.

The IMPLAN model divides the impacts into three effects: direct, indirect, and induced. Direct effects represent the response for a given industry per million dollars of final demand for that same industry. Indirect effects represent the response by all local industries caused by the iteration of industries purchasing from industries per million dollars of final demand for a given industry. The induced effects represent the response by all local industries caused by the expenditures of new household income generated by the direct and indirect effects per million dollars of final demand for a given industry. The total effect is the summation of these which will be the focus of the analysis.

Baseline Scenario - Inputs with Land Remaining in CRP

The baseline used in this study was that the land would remain in CRP. Revenues resulting from leaving the land in CRP were measured. They were then put into the IMPLAN model. Table 1 shows the derivation of the revenue values that were inputted into the model. In Table 1, revenue is measured as the sum of payments received by

farmers from the government and revenue from production (actual production multiplied by an average price). These numbers were obtained from the 1995 Texas Agricultural Statistics Survey.

Alternative Scenario - Inputs with Land Coming Out of CRP

After studying the effects of leaving land in CRP, returning the land to production was then studied. Table 2 shows the revenues generated from putting the land back into production. The revenues were a result of the summation of revenues from land in production, found using the 1995 Agricultural Statistics Survey, plus the estimated yield on CRP acres multiplied by an average price. These revenues were then inputted into IMPLAN, and the model was run to determine the impacts.

Difference Between the Two Scenarios

Bringing the land out of CRP resulted in an increase in agricultural production of $341 million. Including indirect and induced effects, total output from the region increased by $603 million. The greatest increase came from land going back into cotton production. Cotton production contributed $431 million of the total increase in output. This accounted for 71.5% of the increase. While wheat accounts for a larger number of crop acres, cotton is a higher value crop. Cotton also requires substantial processing, including many machines and people to perform the processing. Wheat, on the other hand, requires a more simplified processing. Food Grains, or wheat, accounts for $94 million of the total. This is only 15.6% of the total increase in output, however, $94 million is a significant amount of added output for the region. Feed Grains, which is

Table 1-Inputs for the Baseline Scenario with Land in CRP (1995)

	CRP Acres[1]	CRP Payments[2,3]	Value of Production[4]	Total Revenue[6]
	(1000)	---------------------------($ Million)-------------------------		
Cotton	1,107	$19	$1,176	$1,215
Food Grains	1,116	$39	$183	$222
Feed Grains	625	$42	$565	$587

1. U.S. Department of Agriculture, Consolidated Farm Service Agency, 1995 Total Farm and Producer Data Reports.
2. Farm Service Agency.
3. Equals Rental Rate of the Land multiplied by the Number of CRP Acres.
4. Calculated by multiplying actual production on the land in 1995 by an average price for the commodity. These figures are obtained from the 1995 Texas Agricultural Statistics.
5. Equals CRP Payments plus Value of Production (difference in numbers may be due to rounding).

Table 2-Inputs for the Alternative Scenario with CRP Land in Crop Production (1995)

	CRP Acres[1]	Estimated Value of[2,3] Production From CRP Acres	Value of Production[4] Non-CRP Land	Total Revenue[6]
	(1000)	---------------------------($ Million)-------------------------		
Cotton	1,107	$317	$1,176	$1,493
Food Grains	1,116	$124	$183	$307
Feed Grains	625	$95	$565	$661

1. U.S. Department of Agriculture, Consolidated Farm Service Agency, 1995 Total Farm and Producer Data Reports.
2. 1995 Texas Agricultural Statistics.
3. Equals Yield per Acre multiplied by the Number of Acres in CRP. This is then multiplied by an Average Price.
4. Calculated by multiplying the yield per acre by the CRP acres and then by the average price. The yield per acre is based on land currently in production and the average price is an average of 1995 prices for the commodity. Both of these are obtained from the 1995 Texas Agricultural Statistics.
5. Equals Estimated Value of Production from CRP Acres plus Value of Production from Non-CRP Land.

composed of corn, sorghum, barley, and oats, contributes the least amount to the total increase in output, making up only 12.9% of the total increase, or $78 million in production. As a result of returning CRP land to production, cotton production increased by 23%, as seen by the direct effects. Food Grains actually increased by 38%, which is a higher percentage change than observed in cotton production. However, since cotton production is so prominent in the area, the smaller percentage change still creates a much higher impact on total output. Feed Grains increased only by 13%.

The direct effects on gross sales, or output are the highest of the three types of effects, direct, indirect, and induced. They account for $341 million of the total $603 million effects. This is a substantial amount. They represent the responses of the sectors to increased production within those sectors. The indirect and induced effects are not as large because an increase in production will impact mainly the producer, while only having trickle down effects on local industries and households.

The boost in production has also led to an increase in the number of jobs in the region, 9,328.3 jobs (Table 4). This is a 1.6% increase in the total number of jobs in the region. Cotton contributed the most with 6800 jobs, or 1% of the total jobs in the region, resulting from the increase in cotton production. This represented 70% of the total, with Food Grains making up 20.5% and Feed Grains contributing 10%. The direct effects contributed 3,600 jobs. These account for the jobs created in the three sectors studied in the model. 4,000 jobs were created by indirect effects. These effects are higher than the direct and induced effects. This is to be expected. Indirect effects are caused by a response by local industries to an increase in agricultural production. As the farmers

Table 3-Impact on Gross Sales of Moving CRP Land into Crop Production

	Direct	Indirect	Induced	Total
	--------------------------------($ Million)-------------------------------			
Cotton	$235	$106	$90	$431
Food Grains	$57	$27	$11	$94
Feed Grains	$49	$19	$9	$78
Total	$341	$152	$110	$603

Table 4-Relative Value of Production on CRP and Non-CRP Land

	CRP Land $ Million	Non-CRP Land $ Million
Cotton	$317	$1,716
Food Grains	$124	$183
Feed Grains	$95	$565
	% of Total Revenue	% of Total Revenue
Cotton	21%	79%
Food Grains	40%	60%
Feed Grains	14%	85%

Table 5-Impact on Employment of Moving CRP Land into Crop Production

	Direct	Indirect	Induced	Total Employment Increase	
				Jobs	As Percent of[1] Regional Jobs
Cotton	2,000	3,300	1,400	6,800	1.1%
Food Grains	1,000	400	200	2,000	0.3%
Feed Grains	600	300	150	980	0.2%
Total	3,600	4,000	1,750	9,780	1.6%

1. This is taken as percentage of the total number of jobs in the region. The total number of jobs in the region is 595,000.

produce more, they will also require more inputs from agribusiness firms. Agribusiness will benefit from the increase in demand for inputs, leading to more jobs in the area. The induced effects are much lower than the preceding effects, creating only 1,750 jobs. These jobs are a result of households spending more in the region as a result of increased incomes. Even though households are spending more, they are not as big a force as agribusiness or the three sectors discussed. An increase in cotton production increased employment in that business by 22.8% over the level experienced when the land was still in CRP. Food Grains showed a higher percentage increase, as also observed with production, of 38.3%. Feed Grains only increased 12.5% over the level experienced when the CRP land was not in production.

It is interesting to see how the different commodities played a part in these impacts. Cotton had the biggest impact even though it lagged wheat in the number of acres to come back into production. Cotton contributed $431 million to the increase in output. It also provided 6,810 of the new jobs for the region. This represents about a 1% increase in the 595,000 jobs in the region. Food grains, which measured the amount of wheat, accounted for $94 million of output and 1,534 jobs for the area. Feed grains, which consisted of corn, sorghum, barley, and oats, contributed $78 million to output and 985 jobs.

One aspect that cannot be determined by the model are the environmental impacts that bringing CRP land back into production will have. The whole idea surrounding CRP land was an environmental one. CRP was supposed to take highly sensitive land out of production. Wind erosion impacts are slightly different than most environmental impacts. They are interesting because the land shifts, the wind blows land from one place

to another. Therefore, the issue becomes one of particle polluting resulting from dirt

moving from place to place. Some land enrolled in the program had wetlands and other

environmentally sensitive areas on it. Taking this land out of CRP and putting it back

into production could have severe impacts on the environment, and this cannot be

measured in terms of output or jobs generated.

Chapter 4 - Summary and Conclusions

Summary

This study was undertaken to determine the economic effects on the Texas Panhandle of removing land from the Conservation Reserve Program and returning it to production. The study area was chosen because of the relatively large amount of land enrolled in CRP. The area was also a focal point in the last CRP sign-up, the 16th sign-up. Texas farmers felt they got a raw deal during the last sign-up because of an increased emphasis on environmental issues such as water quality. This area is more sensitive toward wind erosion, and the people in the Panhandle counties, which contain the bulk of Texas CRP land, wonder if they would be better off with or without CRP. Texas had over one million acres come out of the program.

Objectives

The overall objective of the study was to evaluate the economic impacts of removing acreage from the CRP program on the Texas Panhandle. Specifically, the objectives included developing a background on the legislative history of CRP that led to the Texas controversy, as well as analyzing the consequences of CRP on the economic activity in the study area. The main hypothesis is that paying farmers to take land out of production adversely impacts industries closely related to agriculture. The other hypothesis is that these economic impacts are not made up for by direct rental payments from the government.

Results

Two scenarios were examined in order to determine the impacts on the area. The first scenario, the baseline scenario, was for the land to remain in CRP with additional revenues coming from government rental payments for the CRP land. The second scenario was to take the land out of CRP and return it to production. The results showed that it was better if farmers put their land back into production rather that keeping it in the Conservation Reserve Program. When the land was put back into production, output and employment increased in the area. This meant a growing economy for the region because input supply firms, or agribusiness, in the area would be supplying more to farmers, and hence putting more dollars into to the economy in the form of wages to new employees, buying property in the communities, and other local expenditures that would boost the economy.

Conclusions

The economic impacts of returning the CRP land to production would greatly benefit the sixty county area studied. The main assumption made behind this is that the land has the same yield as land already in production. In fact, the prognosis for the area looks very good. Outputs increased as well as the number of jobs in the area. This should help provide a boost for the economy in the region.

Since CRP rental rates are based on an average price received on the production acres, net farm incomes will not change significantly, rather come from a different source. With land in CRP, the income would come from government payments to the

farmer. If the CRP land were put back into production, income would come from selling the commodity on the open market. The two should be approximately the same. The difference will come from the lower productivity of the land that was in CRP. Therefore, farmers will be about as well off as before.

Farmers will be subject to more world price fluctuations, although it is hard to say how severe these fluctuations will be. These price fluctuations will most likely be the net effects of CRP land coming back into production rather than effects on income. Land coming back into production in the area will increase the output in that area, but in the grand scheme, this increase in production will not affect prices. Since agriculture is becoming a more global market, it is unrealistic to presume that 3 million acres coming back into production will be able to drive world prices down.

The environment will be negatively impacted, this is a definite. The problem with this is that there is no way to know exactly what the consequences to the environment will be. These cannot be measured in nominal terms. Therefore, it is not known how adverse the prospect of returning this land to production could be.

Agribusiness firms will increase their marketing as a result of increased production in the area. This increase will be fairly substantial, leading to an increase in employment, as seen in the employment impact results from the model. While employment will increase, the distribution of this employment will not be equal in the area. Most of the increase will be seen in the urban centers of Lubbock and Amarillo. Nevertheless, in this area, a small increase in employment in some towns could have a significant impact. For example, an additional 10 jobs in a town of 500 people could have some major impacts.

Weakness of the Study

Weaknesses are inherent in any study, including this one. This makes it necessary for further study into the problem. This study assumes that the yield of land coming out of CRP and back into production will be the same as land already in production. This may or may not be true. There have been arguments that the yield will actually decline when the land is brought back into production because of the nature of the land and the fact that it was, at one time, in the CRP program. On the other side, some say that the land coming out of the program will actually have a higher yield than land already in production because it has been able to recuperate, with the help of conservation practices, over the ten years it was idled.

Another important weakness of the study is the assumption that all CRP land would return to production. This is not necessarily the case. In all likelihood, at least a portion of the land will be sold or rented for non-agricultural uses. Farmers have several options for their land, so they might not choose the production option.

The input-output model used was assumed to capture all the effects of putting the CRP land back into production. This model had not previously been used by anyone performing other related studies. In fact, it is a relatively new model, so there is still much to learn about the IMPLAN Model. Further use of this model will alleviate this problem in the future.

One rather important weakness to mention is the fact that the input-output model is based on a static transactions matrix. Shocking the model by putting more land into production will increase sales in existing trade relationships, but not add new trading

lines. In the local economy, a shock of this nature may create new businesses and change

trading patterns. This may not be a major problem in this study because the land has

been in production before, so lines of trade in commodities are well established and not as

likely to change.

There are weaknesses in the study that must be addressed. This is the reason that

future study is important. While the results of the study prove the hypothesis originally

offered, there may be some minor problems with the study that could skew the results.

Since this study has not been performed by another person, the research methods and

results cannot be compared. Future study into this particular problem will help reveal the

inherent weaknesses of the original study.

References

Feist, Joseph Clarence, Jr., "An Analysis of Consumer Purchasing Patterns," master's thesis, Texas A&M University, College Station, Texas, 1991.

Johnson, James B., C. Robert Taylor, Richard T. Clark, Stephen H. Amosson, and H. Arlen Smith. "The Conservation Reserve Policy." 1995 Farm Bill: Policy Options and Consequences. Ed. Ronald D. Knutson. College Station: Texas A&M University System, 1996. 109-114.

Knutson, Ronald D., J.B. Penn, and Barry L. Flinchbaugh. Agricultural and Food Policy. Upper Saddle River: Prentice Hall, 1998.

Knutson, Ronald D., Joe K. Davis, Allan W. Gray, Jackie M. McClaskey, Donna P. Adcock, David P. Anderson, John B. Penson, Jr., Edward G. Smith, and Joe L. Outlaw, "Economic Dimensions of Conservation Reserve and Target Price Program Interactions," Agriculture and Food Policy Center Working Paper, 94-3, February 1994.

Knutson, Ronald D., Jackie McClaskey, Joe Davis, Allan Gray, Donna Adcock, David Anderson, John Penson, Edward Smith, Joe Outlaw, "Impacts of Changing Farm Program Expenditures on the Great Plains," Agriculture and Food Policy Center Working Paper, 94-5, September 1994.

McClaskey, Jackie Marie, "Agriculture and the Great Plains: The Impact of Changes in Agricultural Policy," master's thesis, Texas A&M University, College Station, Texas, 1995.

Minnesota IMPLAN Group, Inc. IMPLAN Professional: Social Accounting & Impact Analysis Software. Stillwater: Minnesota IMPLAN Group, Inc., 1996, 1997.

Outlaw, Joe Layne. "A Framework for Identifying Rural Agribusiness Centers," master's thesis, Texas A&M University, College Station, Texas, 1988.

Taylor, C. Robert, "Aggregate Economic Effects of CRP Land Returning to Production," The Journal of Soil and Water Conservation, Vol. 49, No. 5, September 1994, p. 473-476.

Texas Agricultural Statistics, Texas Agricultural Statistics Service, College Station, 1995.

United States Department of Agriculture. Consolidated Farm Service Agency. Preparations for CRP Sign-up 13. Washington: United States Department of Agriculture, 1996.

United States Department of Agriculture. Consolidated Farm Service Agency. 1995 Total Farm and Producer Data. Diskette. 1995.

United States Department of Agriculture. Farm Service Agency. The Conservation Reserve Program. Washington: United States Department of Agriculture, 1997.

United States Department of Agriculture. Farm Service Agency. Fact Sheet: Conservation Reserve Program Sign-Up 16 Environmental Benefits Index. Washington: United States Department of Agriculture, 1997.

United States Department of Agriculture. Natural Resources Conservation Service. Conservation Reserve Program Environmental Benefit Index Fact Sheet. Pullman: NRCS Washington State, 1997.

United States Department of Agriculture. Office of Communications News Room.

Clinton Administration Announces Final Conservation Reserve Program Rules.

Washington: United States Department of Agriculture, 1997.

United States Department of Agriculture. Office of Communications News Room.

Conservation Reserve Program Final Rule. Washington: United States

Department of Agriculture, 1997.

United States Department of Commerce, Economics and Statistics Administration,

Bureau of the Census. "Geographic: U.S. Summary and County Level Data."

1992 Census of Agriculture. CD-ROM. 1992.

Appendix

Output Impact

April 16, 1998

IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
C:\Program Files\IMPLAN Professional\models\crp98.iap

Description	Direct*	Indirect*	Induced*	Total*	Deflator
1 Dairy Farm Products	0	25,118	13,393	38,511	1.02
2 Poultry and Eggs	0	1,619,065	53,371	1,672,436	1.02
3 Ranch Fed Cattle	0	1,321,998	241,469	1,563,467	1.02
4 Range Fed Cattle	0	1,111,607	163,658	1,275,265	1.02
5 Cattle Feedlots	0	4,610,204	595,817	5,206,020	1.02
6 Sheep, Lambs and Goats	0	6,097	1,325	7,423	1.02
7 Hogs, Pigs and Swine	0	26,316	6,451	32,767	1.02
8 Other Meat Animal Products	0	3,545	830	4,375	1.02
9 Miscellaneous Livestock	0	615,339	41,267	656,606	1.02
10 Cotton	235,224,633	3,048,841	13,154	238,286,635	1.02
11 Food Grains	56,791,466	2,137,734	10,040	58,939,242	1.02
12 Feed Grains	49,430,142	3,381,093	77,830	52,889,065	1.02
13 Hay and Pasture	0	247,688	19,712	267,401	1.02
14 Grass Seeds	0	140,134	276	140,410	1.02
16 Fruits	0	4,932	2,330	7,262	1.02
17 Tree Nuts	0	4,081	2,779	6,860	1.02
18 Vegetables	0	236,122	126,611	362,732	1.02
19 Sugar Crops	0	16,319	526	16,846	1.02
20 Miscellaneous Crops	0	34,117	1,374	35,491	1.02
21 Oil Bearing Crops	0	368,124	14,546	382,670	1.02
22 Forest Products	0	47	12	58	1.02
23 Greenhouse and Nursery Products	0	193,211	34,820	228,030	1.02
24 Forestry Products	0	319	172	491	1.06
25 Commercial Fishing	0	33	3,183	3,216	1.06
26 Agricultural, Forestry, Fishery Servi	0	57,498,694	62,896	57,561,589	1.02
27 Landscape and Horticultural Service	0	88,838	107,211	196,049	1.02
28 Iron Ores	0	0	0	0	0.97
31 Gold Ores	0	476	225	701	0.97
34 Metal Mining Services	0	14	7	21	0.97
35 Uranium-radium-vanadium Ores	0	14	6	20	0.97
37 Coal Mining	0	5,259	9,550	14,809	0.99
38 Natural Gas & Crude Petroleum	0	708,099	903,041	1,611,140	0.99
39 Natural Gas Liquids	0	160,973	192,525	353,498	0.99
40 Dimension Stone	0	1,607	98	1,706	1.02
41 Sand and Gravel	0	971	423	1,394	1.02
42 Clay, Ceramic, Refractory Minerals,	0	0	0	1	1.02
43 Potash, Soda, and Borate Minerals	0	2,972	3,719	6,690	1.02
45 Chemical, Fertilizer Mineral Minini	0	26,830	1,543	28,373	1.02
46 Nonmetallic Minerals (Except Fuels	0	23	10	32	1.02
47 Misc. Nonmetallic Minerals, N.E.C.	0	56	26	82	1.02
55 Maintenance and Repair, Residentia	0	342,576	468,845	811,421	1.02
56 Maintenance and Repair Other Facil	0	4,984,852	2,123,885	7,108,737	1.02
57 Maintenance and Repair Oil and Ga	0	12,831	16,325	29,156	0.10
58 Meat Packing Plants	0	30,947	1,592,024	1,622,970	0.99
59 Sausages and Other Prepared Meats	0	115	26,308	26,423	0.99
65 Fluid Milk	0	1,642	396,909	398,551	1.01
68 Dehydrated Food Products	0	4	1,105	1,109	1.01
69 Pickles, Sauces, and Salad Dressings	0	194	12,427	12,621	1.01
71 Frozen Specialties	0	6	1,157	1,163	1.01
72 Flour and Other Grain Mill Products	0	294	7,663	7,957	1.02
76 Wet Corn Milling	0	2,987	9,304	12,291	1.02
77 Dog, Cat, and Other Pet Food	0	288	6,892	7,181	1.02
78 Prepared Feeds, N.E.C	0	45,034	11,606	56,640	1.02
79 Bread, Cake, and Related Products	0	1,158	483,832	484,991	1.03
80 Cookies and Crackers	0	38	5,138	5,176	1.03
81 Sugar	0	129	1,995	2,124	1.00
82 Confectionery Products	0	26	4,359	4,384	1.00
86 Cottonseed Oil Mills	0	4,058	2,983	7,041	1.02
88 Vegetable Oil Mills, N.E.C	0	16,922	6,147	23,068	1.02
89 Animal and Marine Fats and Oils	0	1,581	514	2,094	1.02
90 Shortening and Cooking Oils	0	3,614	54,117	57,732	1.02
93 Wines, Brandy, and Brandy Spirits	0	12	1,873	1,885	1.01
95 Bottled and Canned Soft Drinks &	0	208	23,989	24,197	1.01
100 Potato Chips & Similar Snacks	0	86	249,208	249,294	1.00

1995 Dollars

IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
C:\Program Files\IMPLAN Professional\models\crp98.iap

Description	Direct*	Indirect*	Induced*	Total*	Deflator
101 Manufactured Ice	0	69	8,422	8,491	1.00
103 Food Preparations, N.E.C	0	870	135,672	136,542	1.00
108 Broadwoven Fabric Mills and Finish	0	1,714	28,152	29,866	1.00
111 Hosiery, N.E.C	0	0	3,505	3,505	1.00
116 Yarn Mills and Finishing Of Textile	0	310	1,814	2,124	1.00
123 Textile Goods, N.E.C	0	2,864	216	3,080	0.99
124 Apparel Made From Purchased Mate	0	3,376	353,672	357,048	1.01
125 Curtains and Draperies	0	864	23,356	24,220	1.01
126 Housefurnishings, N.E.C	0	7,265	172,372	179,637	1.01
127 Textile Bags	0	18,843	1,113	19,956	1.01
128 Canvas Products	0	9,418	17,051	26,468	1.01
129 Pleating and Stitching	0	81	2,336	2,417	1.01
130 Automotive and Apparel Trimmings	0	549	39,152	39,701	1.01
132 Fabricated Textile Products, N.E.C.	0	1,485	8,734	10,220	1.01
137 Millwork	0	67,304	33,729	101,034	1.08
138 Wood Kitchen Cabinets	0	1,596	1,588	3,184	1.08
140 Structural Wood Members, N.E.C	0	2,464	1,243	3,708	1.08
142 Wood Pallets and Skids	0	39,042	20,698	59,740	1.05
147 Wood Products, N.E.C	0	11,597	22,335	33,933	1.05
148 Wood Household Furniture	0	28	15,526	15,554	1.02
149 Upholstered Household Furniture	0	2	1,681	1,682	1.02
151 Mattresses and Bedsprings	0	60	16,856	16,917	1.02
154 Wood Office Furniture	0	4	29	33	1.01
156 Public Building Furniture	0	340	401	741	1.01
157 Wood Partitions and Fixtures	0	2,627	2,067	4,694	1.02
164 Paperboard Containers and Boxes	0	412,306	144,681	556,987	1.01
166 Paper Coated & Laminated N.E.C.	0	93	253	346	0.99
173 Converted Paper Products, N.E.C	0	99	298	397	0.99
174 Newspapers	0	174,831	286,217	461,048	1.05
175 Periodicals	0	7,799	21,515	29,314	1.03
176 Book Publishing	0	3,864	36,745	40,609	1.03
177 Book Printing	0	383	1,048	1,432	1.03
178 Miscellaneous Publishing	0	32,769	53,563	86,333	1.04
179 Commercial Printing	0	131,885	177,275	309,161	1.01
180 Manifold Business Forms	0	11,344	9,292	20,636	1.01
183 Bookbinding & Related	0	115	538	654	1.02
184 Typesetting	0	562	937	1,498	1.01
187 Industrial Gases	0	5,836	2,909	8,745	0.99
189 Inorganic Chemicals Nec.	0	3,380	1,643	5,023	0.99
190 Cyclic Crudes, Interm. & Indus. Org	0	222,559	103,683	326,242	0.99
195 Drugs	0	743	25,029	25,771	1.04
196 Soap and Other Detergents	0	747	11,386	12,133	1.02
197 Polishes and Sanitation Goods	0	7,813	13,978	21,791	1.02
199 Toilet Preparations	0	75	19,261	19,336	1.02
200 Paints and Allied Products	0	125	106	231	1.01
202 Nitrogenous and Phosphatic Fertiliz	0	1,412,906	9,264	1,422,169	0.99
203 Fertilizers, Mixing Only	0	160,534	857	161,391	0.99
204 Agricultural Chemicals, N.E.C	0	225,944	2,557	228,502	0.99
205 Adhesives and Sealants	0	4,078	2,741	6,819	1.02
208 Carbon Black	0	408	193	601	1.02
209 Chemical Preparations, N.E.C	0	202,524	93,571	296,095	1.02
210 Petroleum Refining	0	2,230,564	2,266,321	4,496,885	0.96
211 Paving Mixtures and Blocks	0	5,624	2,482	8,106	0.99
212 Asphalt Felts and Coatings	0	12,163	6,161	18,323	0.99
215 Tires and Inner Tubes	0	477	269	746	1.01
217 Rubber and Plastics Hose and Beltin	0	57	16	73	1.02
218 Gaskets, Packing and Sealing Devic	0	96	60	156	1.02
219 Fabricated Rubber Products, N.E.C.	0	177	231	408	1.02
220 Miscellaneous Plastics Products	0	13,594	10,771	24,364	1.01
221 Leather Tanning and Finishing	0	772	13,770	14,542	1.01
224 Shoes, Except Rubber	0	38	4,552	4,590	1.02
229 Leather Goods, N.E.C	0	4,906	4,321	9,227	1.01
230 Glass and Glass Products, Exc Cont	0	45,768	134,316	180,084	1.02
232 Cement, Hydraulic	0	188	90	278	1.02

1995 Dollars

Output Impact

April 16, 1998

IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
C:\Program Files\IMPLAN Professional\models\crp98.iap

Description	Direct*	Indirect*	Induced*	Total*	Deflator
241 Pottery Products, N.E.C	0	43	810	853	1.01
242 Concrete Block and Brick	0	18	8	25	1.02
243 Concrete Products, N.E.C	0	184	189	373	1.02
244 Ready-mixed Concrete	0	1,092	454	1,547	1.02
246 Gypsum Products	0	3,491	2,135	5,626	1.02
247 Cut Stone and Stone Products	0	13	22	35	1.01
250 Minerals, Ground Or Treated	0	40	21	61	1.01
253 Nonmetallic Mineral Products, N.E.	0	115	232	346	1.01
254 Blast Furnaces and Steel Mills	0	922	214	1,136	1.00
256 Steel Wire and Related Products	0	1,862	274	2,136	1.00
258 Steel Pipe and Tubes	0	90	22	113	1.00
259 Iron and Steel Foundries	0	27	5	32	1.01
260 Primary Copper	0	251	264	515	0.96
261 Primary Aluminum	0	5	13	18	0.96
262 Primary Nonferrous Metals, N.E.C.	0	42	61	103	0.96
263 Secondary Nonferrous Metals	0	25	41	66	0.97
264 Copper Rolling and Drawing	0	79	40	119	0.98
265 Aluminum Rolling and Drawing	0	194	226	420	0.98
266 Nonferrous Rolling and Drawing, N.	0	26	19	45	0.98
267 Nonferrous Wire Drawing and Insul	0	404	251	655	0.98
268 Aluminum Foundries	0	30	15	45	1.01
269 Brass, Bronze, and Copper Foundrie	0	525	139	663	1.01
271 Metal Heat Treating	0	55	24	79	0.97
273 Metal Cans	0	4,598	3,979	8,577	0.98
278 Hardware, N.E.C.	0	639	1,320	1,959	1.02
279 Metal Sanitary Ware	0	177	125	302	1.02
280 Plumbing Fixture Fittings and Trim	0	6,290	2,928	9,218	1.02
282 Fabricated Structural Metal	0	1,167	749	1,916	1.01
283 Metal Doors, Sash, and Trim	0	9,843	9,672	19,515	1.01
284 Fabricated Plate Work (Boiler Shops	0	4,441	2,260	6,701	1.01
285 Sheet Metal Work	0	2,787	2,173	4,960	1.01
286 Architectural Metal Work	0	364	126	490	1.01
287 Prefabricated Metal Buildings	0	783	109	892	1.01
290 Iron and Steel Forgings	0	499	82	581	1.00
295 Plating and Polishing	0	287	298	586	1.02
296 Metal Coating and Allied Services	0	567	638	1,205	1.02
298 Ammunition, Except For Small Arm	0	11,493	30,383	41,875	1.03
299 Small Arms	0	1	3	3	1.03
300 Other Ordnance and Accessories	0	22	15	37	1.03
301 Industrial and Fluid Valves	0	8,385	4,084	12,470	1.00
303 Pipe, Valves, and Pipe Fittings	0	2,044	1,028	3,072	1.00
304 Miscellaneous Fabricated Wire Prod	0	3,069	501	3,571	1.00
308 Internal Combustion Engines, N.E.C	0	35,963	8,827	44,791	1.02
309 Farm Machinery and Equipment	0	1,107,892	20,152	1,128,044	1.02
311 Construction Machinery and Equip	0	25,494	3,319	28,813	1.02
313 Oil Field Machinery	0	10,651	5,202	15,853	1.02
320 Industrial Patterns	0	37	20	57	1.02
321 Special Dies and Tools and Accesso	0	4,441	2,445	6,886	1.02
324 Welding Apparatus	0	6,984	4,455	11,439	1.02
330 Food Products Machinery	0	389	330	719	1.02
331 Special Industry Machinery N.E.C.	0	4,359	2,819	7,178	1.02
332 Pumps and Compressors	0	13,006	3,514	16,520	1.02
333 Ball and Roller Bearings	0	2	4	6	1.02
334 Blowers and Fans	0	212	135	347	1.02
336 Power Transmission Equipment	0	2,191	909	3,100	1.02
338 General Industrial Machinery, N.E.	0	2,940	2,136	5,076	1.02
339 Electronic Computers	0	2,394	10,662	13,057	0.91
342 Computer Peripheral Equipment,	0	1,702	8,886	10,588	0.91
343 Calculating and Accounting Machin	0	93	335	428	0.91
352 Fluid Power Pumps & Motors	0	327	156	483	1.01
354 Industrial Machines N.E.C.	0	2,983	1,869	4,852	1.01
355 Transformers	0	32	47	79	1.01
357 Motors and Generators	0	1,824	394	2,218	1.02
359 Relays & Industrial Controls	0	399	432	832	1.02

1995 Dollars

IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
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Description	Direct*	Indirect*	Induced*	Total*	Deflator
365 Household Vacuum Cleaners	0	34,324	34,538	68,862	1.01
368 Wiring Devices	0	568	501	1,069	1.02
369 Lighting Fixtures and Equipment	0	143	80	223	1.02
370 Radio and TV Receiving Sets	0	12	3,018	3,030	0.99
371 Phonograph Records and Tape	0	9	65	74	0.99
373 Radio and Tv Communication Equi	0	457	652	1,109	1.01
377 Semiconductors and Related Device	0	66,806	92,740	159,546	1.00
378 Electronic Components, N.E.C.	0	9,345	16,784	26,128	1.00
383 Electrical Equipment, N.E.C.	0	1,723	4,302	6,025	1.00
385 Truck and Bus Bodies	0	395	178	573	1.03
386 Motor Vehicle Parts and Accessories	0	227,493	108,513	336,006	1.03
387 Truck Trailers	0	6,472	117,729	124,200	1.03
388 Motor Homes	0	340	868	1,207	1.03
389 Aircraft	0	407	4,111	4,518	1.02
390 Aircraft and Missile Engines and Par	0	323	508	831	1.02
391 Aircraft and Missile Equipment,	0	179	216	394	1.02
393 Boat Building and Repairing	0	1	32	33	1.02
396 Complete Guided Missiles	0	49	82	132	1.02
399 Transportation Equipment, N.E.C	0	1,977	381	2,358	1.01
400 Search & Navigation Equipment	0	294	623	917	1.01
402 Automatic Temperature Controls	0	1,955	1,046	3,001	1.03
403 Mechanical Measuring Devices	0	7,707	4,201	11,908	1.03
404 Instruments To Measure Electricity	0	28	42	69	1.03
407 Surgical and Medical Instrument	0	33	2,613	2,646	1.02
408 Surgical Appliances and Supplies	0	386	19,068	19,454	1.02
412 Ophthalmic Goods	0	837	15,371	16,208	1.03
415 Jewelry, Precious Metal	0	4	522	526	1.01
420 Games, Toys, and Childrens Vehicle	0	106	21,830	21,935	1.01
421 Sporting and Athletic Goods, N.E.C.	0	3,490	10,241	13,731	1.01
426 Costume Jewelery	0	10	1,046	1,056	1.02
428 Brooms and Brushes	0	6,760	10,687	17,447	1.02
429 Signs and Advertising Displays	0	20,897	27,765	48,662	1.02
432 Manufacturing Industries, N.E.C.	0	1,244	2,403	3,647	1.02
433 Railroads and Related Services	0	717,568	218,704	936,272	1.00
434 Local, Interurban Passenger Transit	0	49,337	183,131	232,468	1.00
435 Motor Freight Transport and Wareh	0	7,374,080	1,708,656	9,082,737	1.01
436 Water Transportation	0	22,206	24,444	46,649	1.01
437 Air Transportation	0	308,377	521,278	829,655	1.05
438 Pipe Lines, Except Natural Gas	0	202,390	140,190	342,581	1.03
439 Arrangement Of Passenger Transpor	0	28,291	85,174	113,466	1.04
440 Transportation Services	0	237,280	84,039	321,318	1.04
441 Communications, Except Radio and	0	855,975	2,444,110	3,300,085	1.01
442 Radio and TV Broadcasting	0	402,038	536,849	938,887	1.01
443 Electric Services	0	1,820,736	3,305,363	5,126,099	1.02
444 Gas Production and Distribution	0	464,647	732,690	1,197,337	1.00
445 Water Supply and Sewerage System	0	5,215	80,735	85,950	1.06
446 Sanitary Services and Steam Supply	0	755,409	68,915	824,324	1.06
447 Wholesale Trade	0	12,171,403	6,507,155	18,678,559	1.01
448 Building Materials & Gardening	0	85,432	507,559	592,991	1.02
449 General Merchandise Stores	0	171,245	2,390,746	2,561,991	1.02
450 Food Stores	0	299,440	3,133,984	3,433,424	1.02
451 Automotive Dealers & Service Stati	0	1,291,500	3,248,629	4,540,129	1.02
452 Apparel & Accessory Stores	0	80,979	1,102,975	1,183,954	1.02
453 Furniture & Home Furnishings Store	0	77,419	985,982	1,063,402	1.02
454 Eating & Drinking	0	204,915	6,099,780	6,304,695	1.02
455 Miscellaneous Retail	0	347,416	2,856,306	3,203,722	1.02
456 Banking	0	4,793,670	4,600,613	9,394,283	1.07
457 Credit Agencies	0	145,945	456,210	602,155	1.10
458 Security and Commodity Brokers	0	217,649	617,930	835,579	0.99
459 Insurance Carriers	0	839,070	1,682,945	2,522,015	1.07
460 Insurance Agents and Brokers	0	182,775	366,597	549,372	1.07
461 Owner-occupied Dwellings	0	0	10,277,636	10,277,636	1.03
462 Real Estate	0	18,183,230	7,151,011	25,334,242	1.03
463 Hotels and Lodging Places	0	438,443	977,868	1,416,311	1.04

995 Dollars

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IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
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Description	Direct*	Indirect*	Induced*	Total*	Deflator
464 Laundry, Cleaning and Shoe Repair	0	626,904	521,931	1,148,835	1.03
465 Portrait and Photographic Studios	0	1,290	164,963	166,252	1.03
466 Beauty and Barber Shops	0	0	451,174	451,174	1.02
467 Funeral Service and Crematories	0	0	272,439	272,439	1.04
468 Miscellaneous Personal Services	0	50,382	414,909	465,290	1.03
469 Advertising	0	107,307	142,094	249,400	1.03
470 Other Business Services	0	396,982	480,064	877,046	1.03
471 Photofinishing, Commercial Photogr	0	33,394	107,637	141,031	1.03
472 Services To Buildings	0	297,721	289,331	587,052	1.03
473 Equipment Rental and Leasing	0	432,127	227,041	659,168	1.03
474 Personnel Supply Services	0	261,118	326,800	587,917	1.03
475 Computer and Data Processing Servi	0	315,220	391,331	706,551	1.03
476 Detective and Protective Services	0	38,862	36,301	75,163	1.03
477 Automobile Rental and Leasing	0	205,037	263,070	468,107	1.03
478 Automobile Parking and Car Wash	0	82,658	265,529	348,187	1.03
479 Automobile Repair and Services	0	514,101	1,368,833	1,882,933	1.03
480 Electrical Repair Service	0	152,314	255,506	407,820	1.05
481 Watch, Clock, Jewelry and Furniture	0	0	81,111	81,111	1.04
482 Miscellaneous Repair Shops	0	1,696,387	264,676	1,961,064	1.02
483 Motion Pictures	0	75,096	684,312	759,409	1.02
484 Theatrical Producers, Bands Etc.	0	28,580	139,077	167,656	1.02
485 Bowling Alleys and Pool Halls	0	0	87,286	87,286	1.04
486 Commercial Sports Except Racing	0	1,280	3,403	4,683	1.02
487 Racing and Track Operation	0	313,780	49,187	362,968	1.02
488 Amusement and Recreation Services	0	7	442,404	442,410	1.03
489 Membership Sports and Recreation	0	10,072	245,120	255,192	1.03
490 Doctors and Dentists	0	0	5,931,203	5,931,203	1.05
491 Nursing and Protective Care	0	0	2,096,228	2,096,228	1.04
492 Hospitals	0	1,772	6,081,213	6,082,984	1.04
493 Other Medical and Health Services	0	38,463	2,002,846	2,041,309	1.03
494 Legal Services	0	567,696	1,833,704	2,401,400	1.04
495 Elementary and Secondary Schools	0	0	194,540	194,540	1.03
496 Colleges, Universities, Schools	0	13,504	915,403	928,907	1.03
497 Other Educational Services	0	2,422	233,061	235,483	1.03
498 Job Trainings & Related Services	0	453	111,351	111,805	1.05
499 Child Day Care Services	0	0	512,664	512,664	1.03
500 Social Services, N.E.C.	0	0	457,157	457,157	1.02
501 Residential Care	0	0	301,463	301,463	1.02
502 Other Nonprofit Organizations	0	7,683	227,886	235,569	1.02
503 Business Associations	0	129,820	277,092	406,913	1.02
504 Labor and Civic Organizations	0	0	699,572	699,572	1.02
505 Religious Organizations	0	0	23,814	23,814	1.02
506 Engineering, Architectural Services	0	34,619	43,416	78,035	1.03
507 Accounting, Auditing and Bookkeep	0	718,596	563,053	1,281,650	1.05
508 Management and Consulting Servic	0	523,469	568,955	1,092,424	0.94
509 Research, Development & Testing S	0	143,826	156,324	300,150	0.94
510 Local Government Passenger Transi	0	7,911	30,725	38,635	1.04
511 State and Local Electric Utilities	0	104,659	191,265	295,924	1.01
512 Other State and Local Govt Enterpri	0	390,108	1,135,314	1,525,422	1.04
513 U.S. Postal Service	0	255,857	787,083	1,042,940	1.03
515 Other Federal Government Enterpris	0	36,305	73,035	109,340	1.01
525 Domestic Services	0	0	319,580	319,580	1.03
	341,446,241	151,685,373	110,076,876	603,208,499	

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IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
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Description	Direct*	Indirect*	Induced*	Total*
1 Dairy Farm Products	0.0	0.1	0.1	0.2
2 Poultry and Eggs	0.0	7.9	0.3	8.2
3 Ranch Fed Cattle	0.0	13.1	2.4	15.5
4 Range Fed Cattle	0.0	11.6	1.7	13.3
5 Cattle Feedlots	0.0	10.5	1.4	11.9
6 Sheep, Lambs and Goats	0.0	0.5	0.1	0.6
7 Hogs, Pigs and Swine	0.0	0.3	0.1	0.4
8 Other Meat Animal Products	0.0	0.1	0.0	0.1
9 Miscellaneous Livestock	0.0	21.3	1.4	22.8
10 Cotton	2,047.6	26.5	0.1	2,074.2
11 Food Grains	991.1	37.3	0.2	1,028.6
12 Feed Grains	570.2	39.0	0.9	610.1
13 Hay and Pasture	0.0	11.7	0.9	12.6
14 Grass Seeds	0.0	5.0	0.0	5.0
16 Fruits	0.0	0.1	0.0	0.1
17 Tree Nuts	0.0	0.1	0.0	0.1
18 Vegetables	0.0	1.9	1.0	2.9
19 Sugar Crops	0.0	0.1	0.0	0.1
20 Miscellaneous Crops	0.0	1.1	0.0	1.1
21 Oil Bearing Crops	0.0	7.0	0.3	7.3
22 Forest Products	0.0	0.0	0.0	0.0 #
23 Greenhouse and Nursery Products	0.0	2.1	0.4	2.4
24 Forestry Products	0.0	0.0	0.0	0.0 #
25 Commercial Fishing	0.0	0.0	0.2	0.2
26 Agricultural, Forestry, Fishery Servi	0.0	3,003.8	3.3	3,007.1
27 Landscape and Horticultural Service	0.0	4.2	5.1	9.3
31 Gold Ores	0.0	0.0	0.0	0.0 #
34 Metal Mining Services	0.0	0.0	0.0	0.0 #
35 Uranium-radium-vanadium Ores	0.0	0.0	0.0	0.0 #
37 Coal Mining	0.0	0.0	0.0	0.1
38 Natural Gas & Crude Petroleum	0.0	3.1	3.9	7.0
39 Natural Gas Liquids	0.0	0.2	0.2	0.4
40 Dimension Stone	0.0	0.0	0.0	0.0 #
41 Sand and Gravel	0.0	0.0	0.0	0.0 #
43 Potash, Soda, and Borate Minerals	0.0	0.0	0.0	0.0 #
45 Chemical, Fertilizer Mineral Minini	0.0	0.2	0.0	0.2
46 Nonmetallic Minerals (Except Fuels	0.0	0.0	0.0	0.0 #
47 Misc. Nonmetallic Minerals, N.E.C.	0.0	0.0	0.0	0.0 #
55 Maintenance and Repair, Residentia	0.0	5.1	7.0	12.0
56 Maintenance and Repair Other Facil	0.0	63.9	27.2	91.1
57 Maintenance and Repair Oil and Ga	0.0	3.6	4.5	8.1
58 Meat Packing Plants	0.0	0.1	4.3	4.4
59 Sausages and Other Prepared Meats	0.0	0.0	0.1	0.1
65 Fluid Milk	0.0	0.0	1.2	1.3
68 Dehydrated Food Products	0.0	0.0	0.0	0.0 #
69 Pickles, Sauces, and Salad Dressings	0.0	0.0	0.0	0.0 #
71 Frozen Specialties	0.0	0.0	0.0	0.0 #
72 Flour and Other Grain Mill Products	0.0	0.0	0.0	0.0 #
76 Wet Corn Milling	0.0	0.0	0.0	0.0 #
77 Dog, Cat, and Other Pet Food	0.0	0.0	0.0	0.0 #
78 Prepared Feeds, N.E.C	0.0	0.1	0.0	0.2
79 Bread, Cake, and Related Products	0.0	0.0	4.2	4.2
80 Cookies and Crackers	0.0	0.0	0.0	0.0 #
81 Sugar	0.0	0.0	0.0	0.0 #
82 Confectionery Products	0.0	0.0	0.0	0.0 #
86 Cottonseed Oil Mills	0.0	0.0	0.0	0.0 #
88 Vegetable Oil Mills, N.E.C	0.0	0.0	0.0	0.1
89 Animal and Marine Fats and Oils	0.0	0.0	0.0	0.0 #
90 Shortening and Cooking Oils	0.0	0.0	0.1	0.1
93 Wines, Brandy, and Brandy Spirits	0.0	0.0	0.0	0.0 #
95 Bottled and Canned Soft Drinks &	0.0	0.0	0.1	0.1
100 Potato Chips & Similar Snacks	0.0	0.0	0.9	0.9
101 Manufactured Ice	0.0	0.0	0.2	0.2
103 Food Preparations, N.E.C	0.0	0.0	0.9	0.9

Number of Jobs
Zeros due to rounding

Employment Impact

April 16, 1998

IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
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Description	Direct*	Indirect*	Induced*	Total*
108 Broadwoven Fabric Mills and Finish	0.0	0.0	0.3	0.3
111 Hosiery, N.E.C	0.0	0.0	0.1	0.1
116 Yarn Mills and Finishing Of Textile	0.0	0.0	0.0	0.0 #
123 Textile Goods, N.E.C	0.0	0.0	0.0	0.0 #
124 Apparel Made From Purchased Mate	0.0	0.1	6.0	6.0
125 Curtains and Draperies	0.0	0.0	0.5	0.5
126 Housefurnishings, N.E.C	0.0	0.1	1.7	1.7
127 Textile Bags	0.0	0.3	0.0	0.3
128 Canvas Products	0.0	0.2	0.3	0.5
129 Pleating and Stitching	0.0	0.0	0.1	0.1
130 Automotive and Apparel Trimmings	0.0	0.0	0.4	0.4
132 Fabricated Textile Products, N.E.C.	0.0	0.0	0.1	0.1
137 Millwork	0.0	0.8	0.4	1.2
138 Wood Kitchen Cabinets	0.0	0.0	0.0	0.1
140 Structural Wood Members, N.E.C	0.0	0.0	0.0	0.0 #
142 Wood Pallets and Skids	0.0	0.6	0.3	0.9
147 Wood Products, N.E.C	0.0	0.2	0.3	0.5
148 Wood Household Furniture	0.0	0.0	0.3	0.3
149 Upholstered Household Furniture	0.0	0.0	0.0	0.0 #
151 Mattresses and Bedsprings	0.0	0.0	0.2	0.2
154 Wood Office Furniture	0.0	0.0	0.0	0.0 #
156 Public Building Furniture	0.0	0.0	0.0	0.0 #
157 Wood Partitions and Fixtures	0.0	0.0	0.0	0.1
164 Paperboard Containers and Boxes	0.0	2.6	0.9	3.4
166 Paper Coated & Laminated N.E.C.	0.0	0.0	0.0	0.0 #
173 Converted Paper Products, N.E.C	0.0	0.0	0.0	0.0 #
174 Newspapers	0.0	3.5	5.8	9.3
175 Periodicals	0.0	0.1	0.2	0.3
176 Book Publishing	0.0	0.0	0.2	0.3
177 Book Printing	0.0	0.0	0.0	0.0 #
178 Miscellaneous Publishing	0.0	0.2	0.4	0.6
179 Commercial Printing	0.0	1.6	2.1	3.7
180 Manifold Business Forms	0.0	0.1	0.1	0.2
183 Bookbinding & Related	0.0	0.0	0.0	0.0 #
184 Typesetting	0.0	0.0	0.0	0.0 #
187 Industrial Gases	0.0	0.1	0.0	0.1
189 Inorganic Chemicals Nec.	0.0	0.0	0.0	0.0 #
190 Cyclic Crudes, Interm. & Indus. Org	0.0	0.4	0.2	0.7
195 Drugs	0.0	0.0	0.2	0.2
196 Soap and Other Detergents	0.0	0.0	0.1	0.1
197 Polishes and Sanitation Goods	0.0	0.0	0.1	0.1
199 Toilet Preparations	0.0	0.0	0.1	0.1
200 Paints and Allied Products	0.0	0.0	0.0	0.0 #
202 Nitrogenous and Phosphatic Fertiliz	0.0	2.8	0.0	2.8
203 Fertilizers, Mixing Only	0.0	0.7	0.0	0.7
204 Agricultural Chemicals, N.E.C	0.0	0.8	0.0	0.8
205 Adhesives and Sealants	0.0	0.0	0.0	0.0 #
208 Carbon Black	0.0	0.0	0.0	0.0 #
209 Chemical Preparations, N.E.C	0.0	0.7	0.3	1.0
210 Petroleum Refining	0.0	1.9	1.9	3.8
211 Paving Mixtures and Blocks	0.0	0.0	0.0	0.0 #
212 Asphalt Felts and Coatings	0.0	0.0	0.0	0.1
215 Tires and Inner Tubes	0.0	0.0	0.0	0.0 #
217 Rubber and Plastics Hose and Beltin	0.0	0.0	0.0	0.0 #
218 Gaskets, Packing and Sealing Devic	0.0	0.0	0.0	0.0 #
219 Fabricated Rubber Products, N.E.C.	0.0	0.0	0.0	0.0 #
220 Miscellaneous Plastics Products	0.0	0.1	0.1	0.2
221 Leather Tanning and Finishing	0.0	0.0	0.1	0.1
224 Shoes, Except Rubber	0.0	0.0	0.1	0.1
229 Leather Goods, N.E.C	0.0	0.2	0.1	0.3
230 Glass and Glass Products, Exc Cont	0.0	0.3	1.0	1.3
232 Cement, Hydraulic	0.0	0.0	0.0	0.0 #
241 Pottery Products, N.E.C	0.0	0.0	0.0	0.0 #
242 Concrete Block and Brick	0.0	0.0	0.0	0.0 #

Number of Jobs
Zeros due to rounding

2

Employment Impact

April 16, 1998

IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
C:\Program Files\IMPLAN Professional\models\crp98.iap

Description	Direct*	Indirect*	Induced*	Total*
243 Concrete Products, N.E.C	0.0	0.0	0.0	0.0 #
244 Ready-mixed Concrete	0.0	0.0	0.0	0.0 #
246 Gypsum Products	0.0	0.0	0.0	0.0 #
247 Cut Stone and Stone Products	0.0	0.0	0.0	0.0 #
250 Minerals, Ground Or Treated	0.0	0.0	0.0	0.0 #
253 Nonmetallic Mineral Products, N.E.	0.0	0.0	0.0	0.0 #
254 Blast Furnaces and Steel Mills	0.0	0.0	0.0	0.0 #
256 Steel Wire and Related Products	0.0	0.0	0.0	0.0 #
258 Steel Pipe and Tubes	0.0	0.0	0.0	0.0 #
259 Iron and Steel Foundries	0.0	0.0	0.0	0.0 #
260 Primary Copper	0.0	0.0	0.0	0.0 #
261 Primary Aluminum	0.0	0.0	0.0	0.0 #
262 Primary Nonferrous Metals, N.E.C.	0.0	0.0	0.0	0.0 #
263 Secondary Nonferrous Metals	0.0	0.0	0.0	0.0 #
264 Copper Rolling and Drawing	0.0	0.0	0.0	0.0 #
265 Aluminum Rolling and Drawing	0.0	0.0	0.0	0.0 #
266 Nonferrous Rolling and Drawing, N.	0.0	0.0	0.0	0.0 #
267 Nonferrous Wire Drawing and Insul	0.0	0.0	0.0	0.0 #
268 Aluminum Foundries	0.0	0.0	0.0	0.0 #
269 Brass, Bronze, and Copper Foundrie	0.0	0.0	0.0	0.0 #
271 Metal Heat Treating	0.0	0.0	0.0	0.0 #
273 Metal Cans	0.0	0.0	0.0	0.0 #
278 Hardware, N.E.C.	0.0	0.0	0.0	0.0 #
279 Metal Sanitary Ware	0.0	0.0	0.0	0.0 #
280 Plumbing Fixture Fittings and Trim	0.0	0.1	0.0	0.1
282 Fabricated Structural Metal	0.0	0.0	0.0	0.0 #
283 Metal Doors, Sash, and Trim	0.0	0.1	0.1	0.2
284 Fabricated Plate Work (Boiler Shops	0.0	0.0	0.0	0.1
285 Sheet Metal Work	0.0	0.0	0.0	0.0 #
286 Architectural Metal Work	0.0	0.0	0.0	0.0 #
287 Prefabricated Metal Buildings	0.0	0.0	0.0	0.0 #
290 Iron and Steel Forgings	0.0	0.0	0.0	0.0 #
295 Plating and Polishing	0.0	0.0	0.0	0.0 #
296 Metal Coating and Allied Services	0.0	0.0	0.0	0.0 #
298 Ammunition, Except For Small Arm	0.0	0.1	0.2	0.3
299 Small Arms	0.0	0.0	0.0	0.0 #
300 Other Ordnance and Accessories	0.0	0.0	0.0	0.0 #
301 Industrial and Fluid Valves	0.0	0.0	0.0	0.1
303 Pipe, Valves, and Pipe Fittings	0.0	0.0	0.0	0.0 #
304 Miscellaneous Fabricated Wire Prod	0.0	0.1	0.0	0.1
308 Internal Combustion Engines, N.E.C	0.0	0.2	0.0	0.2
309 Farm Machinery and Equipment	0.0	8.1	0.1	8.2
311 Construction Machinery and Equip	0.0	0.1	0.0	0.2
313 Oil Field Machinery	0.0	0.1	0.1	0.2
320 Industrial Patterns	0.0	0.0	0.0	0.0 #
321 Special Dies and Tools and Accesso	0.0	0.1	0.0	0.1
324 Welding Apparatus	0.0	0.1	0.0	0.1
330 Food Products Machinery	0.0	0.0	0.0	0.0 #
331 Special Industry Machinery N.E.C.	0.0	0.0	0.0	0.0 #
332 Pumps and Compressors	0.0	0.1	0.0	0.1
333 Ball and Roller Bearings	0.0	0.0	0.0	0.0 #
334 Blowers and Fans	0.0	0.0	0.0	0.0 #
336 Power Transmission Equipment	0.0	0.0	0.0	0.0 #
338 General Industrial Machinery, N.E.	0.0	0.0	0.0	0.0 #
339 Electronic Computers	0.0	0.0	0.1	0.1
342 Computer Peripheral Equipment,	0.0	0.0	0.0	0.1
343 Calculating and Accounting Machin	0.0	0.0	0.0	0.0 #
352 Fluid Power Pumps & Motors	0.0	0.0	0.0	0.0 #
354 Industrial Machines N.E.C.	0.0	0.0	0.0	0.1
355 Transformers	0.0	0.0	0.0	0.0 #
357 Motors and Generators	0.0	0.0	0.0	0.0 #
359 Relays & Industrial Controls	0.0	0.0	0.0	0.0 #
365 Household Vacuum Cleaners	0.0	0.2	0.2	0.5
368 Wiring Devices	0.0	0.0	0.0	0.0 #

Employment Impact

April 16, 1998

IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
C:\Program Files\IMPLAN Professional\models\crp98.iap

Description	Direct*	Indirect*	Induced*	Total*
369 Lighting Fixtures and Equipment	0.0	0.0	0.0	0.0 #
370 Radio and TV Receiving Sets	0.0	0.0	0.0	0.0 #
371 Phonograph Records and Tape	0.0	0.0	0.0	0.0 #
373 Radio and Tv Communication Equi	0.0	0.0	0.0	0.0 #
377 Semiconductors and Related Device	0.0	0.3	0.5	0.8
378 Electronic Components, N.E.C.	0.0	0.0	0.1	0.1
383 Electrical Equipment, N.E.C.	0.0	0.0	0.0	0.0 #
385 Truck and Bus Bodies	0.0	0.0	0.0	0.0 #
386 Motor Vehicle Parts and Accessories	0.0	1.2	0.6	1.8
387 Truck Trailers	0.0	0.0	0.8	0.8
388 Motor Homes	0.0	0.0	0.0	0.0 #
389 Aircraft	0.0	0.0	0.0	0.0 #
390 Aircraft and Missile Engines and Par	0.0	0.0	0.0	0.0 #
391 Aircraft and Missile Equipment,	0.0	0.0	0.0	0.0 #
393 Boat Building and Repairing	0.0	0.0	0.0	0.0 #
396 Complete Guided Missiles	0.0	0.0	0.0	0.0 #
399 Transportation Equipment, N.E.C	0.0	0.0	0.0	0.0 #
400 Search & Navigation Equipment	0.0	0.0	0.0	0.0 #
402 Automatic Temperature Controls	0.0	0.0	0.0	0.0 #
403 Mechanical Measuring Devices	0.0	0.1	0.0	0.1
404 Instruments To Measure Electricity	0.0	0.0	0.0	0.0 #
407 Surgical and Medical Instrument	0.0	0.0	0.0	0.0 #
408 Surgical Appliances and Supplies	0.0	0.0	0.1	0.1
412 Ophthalmic Goods	0.0	0.0	0.3	0.3
415 Jewelry, Precious Metal	0.0	0.0	0.0	0.0 #
420 Games, Toys, and Childrens Vehicle	0.0	0.0	0.3	0.3
421 Sporting and Athletic Goods, N.E.C.	0.0	0.0	0.1	0.2
426 Costume Jewelery	0.0	0.0	0.0	0.0 #
428 Brooms and Brushes	0.0	0.1	0.1	0.2
429 Signs and Advertising Displays	0.0	0.2	0.3	0.5
432 Manufacturing Industries, N.E.C.	0.0	0.0	0.0	0.0 #
433 Railroads and Related Services	0.0	4.7	1.4	6.2
434 Local, Interurban Passenger Transit	0.0	1.6	5.8	7.4
435 Motor Freight Transport and Wareh	0.0	93.5	21.7	115.2
436 Water Transportation	0.0	0.1	0.1	0.2
437 Air Transportation	0.0	2.3	3.9	6.2
438 Pipe Lines, Except Natural Gas	0.0	0.4	0.3	0.7
439 Arrangement Of Passenger Transpor	0.0	0.4	1.1	1.4
440 Transportation Services	0.0	2.3	0.8	3.1
441 Communications, Except Radio and	0.0	3.9	11.2	15.2
442 Radio and TV Broadcasting	0.0	3.3	4.4	7.7
443 Electric Services	0.0	4.8	8.7	13.5
444 Gas Production and Distribution	0.0	1.0	1.5	2.5
445 Water Supply and Sewerage System	0.0	0.0	0.5	0.5
446 Sanitary Services and Steam Supply	0.0	3.8	0.3	4.2
447 Wholesale Trade	0.0	145.4	77.8	223.2
448 Building Materials & Gardening	0.0	2.1	12.7	14.8
449 General Merchandise Stores	0.0	5.3	73.9	79.2
450 Food Stores	0.0	10.2	107.1	117.3
451 Automotive Dealers & Service Stati	0.0	23.2	58.4	81.7
452 Apparel & Accessory Stores	0.0	2.7	36.3	39.0
453 Furniture & Home Furnishings Store	0.0	1.8	23.5	25.3
454 Eating & Drinking	0.0	6.0	177.5	183.5
455 Miscellaneous Retail	0.0	15.5	127.2	142.7
456 Banking	0.0	30.4	29.1	59.5
457 Credit Agencies	0.0	4.8	14.9	19.7
458 Security and Commodity Brokers	0.0	1.5	4.2	5.7
459 Insurance Carriers	0.0	6.1	12.3	18.4
460 Insurance Agents and Brokers	0.0	4.8	9.7	14.5
462 Real Estate	0.0	100.9	39.7	140.6
463 Hotels and Lodging Places	0.0	10.1	22.5	32.6
464 Laundry, Cleaning and Shoe Repair	0.0	27.8	23.2	51.0
465 Portrait and Photographic Studios	0.0	0.0	4.6	4.6
466 Beauty and Barber Shops	0.0	0.0	21.5	21.5

Number of Jobs
Zeros due to rounding

Employment Impact

April 16, 1998

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IMPACT NAME: Revenue-Difference Between with/without CRP   MULTIPLIER: Type II
C:\Program Files\IMPLAN Professional\models\crp98.iap

Description	Direct*	Indirect*	Induced*	Total*
467 Funeral Service and Crematories	0.0	0.0	7.6	7.6
468 Miscellaneous Personal Services	0.0	1.1	8.7	9.7
469 Advertising	0.0	2.1	2.8	4.8
470 Other Business Services	0.0	9.3	11.2	20.4
471 Photofinishing, Commercial Photogr	0.0	0.9	2.9	3.8
472 Services To Buildings	0.0	13.4	13.0	26.4
473 Equipment Rental and Leasing	0.0	4.8	2.5	7.3
474 Personnel Supply Services	0.0	16.8	21.0	37.9
475 Computer and Data Processing Servi	0.0	3.7	4.6	8.2
476 Detective and Protective Services	0.0	2.1	1.9	4.0
477 Automobile Rental and Leasing	0.0	2.5	3.2	5.7
478 Automobile Parking and Car Wash	0.0	1.5	4.8	6.2
479 Automobile Repair and Services	0.0	7.8	20.8	28.6
480 Electrical Repair Service	0.0	2.4	4.1	6.5
481 Watch, Clock, Jewelry and Furniture	0.0	0.0	1.3	1.3
482 Miscellaneous Repair Shops	0.0	28.6	4.5	33.1
483 Motion Pictures	0.0	0.9	8.5	9.4
484 Theatrical Producers, Bands Etc.	0.0	0.5	2.3	2.7
485 Bowling Alleys and Pool Halls	0.0	0.0	3.4	3.4
486 Commercial Sports Except Racing	0.0	0.0	0.1	0.2
487 Racing and Track Operation	0.0	7.8	1.2	9.0
488 Amusement and Recreation Services	0.0	0.0	18.3	18.3
489 Membership Sports and Recreation	0.0	0.5	11.0	11.5
490 Doctors and Dentists	0.0	0.0	58.4	58.4
491 Nursing and Protective Care	0.0	0.0	78.5	78.5
492 Hospitals	0.0	0.0	106.5	106.5
493 Other Medical and Health Services	0.0	0.8	42.7	43.5
494 Legal Services	0.0	7.0	22.7	29.7
495 Elementary and Secondary Schools	0.0	0.0	5.7	5.7
496 Colleges, Universities, Schools	0.0	0.4	25.9	26.3
497 Other Educational Services	0.0	0.1	6.9	7.0
498 Job Trainings & Related Services	0.0	0.0	3.9	4.0
499 Child Day Care Services	0.0	0.0	19.4	19.4
500 Social Services, N.E.C.	0.0	0.0	15.5	15.5
501 Residential Care	0.0	0.0	14.4	14.4
502 Other Nonprofit Organizations	0.0	0.2	7.4	7.6
503 Business Associations	0.0	2.0	4.2	6.2
504 Labor and Civic Organizations	0.0	0.0	26.9	26.9
505 Religious Organizations	0.0	0.0	0.8	0.8
506 Engineering, Architectural Services	0.0	0.6	0.8	1.4
507 Accounting, Auditing and Bookkeep	0.0	12.7	10.0	22.7
508 Management and Consulting Servic	0.0	7.9	8.5	16.4
509 Research, Development & Testing S	0.0	3.2	3.5	6.6
510 Local Government Passenger Transi	0.0	0.1	0.3	0.3
511 State and Local Electric Utilities	0.0	0.5	0.8	1.3
512 Other State and Local Govt Enterpri	0.0	2.4	6.9	9.2
513 U.S. Postal Service	0.0	3.3	10.1	13.4
515 Other Federal Government Enterpris	0.0	0.7	1.5	2.2
525 Domestic Services	0.0	0.0	53.3	53.3
	3,608.9	3,981.4	1,738.0	9,328.3