

THE CENTER FOR



Rural Pennsylvania

A Legislative Agency of the Pennsylvania General Assembly

November 2001

A Retrospective of Pennsylvania's Economic Development Programs

A Retrospective of Pennsylvania's Economic Development Programs

by

C.A. Christofides

Todd Behr

Pats Neelakantan

Professors

Department of Economics

East Stroudsburg University of Pennsylvania

This project was sponsored by a grant from the Center for Rural Pennsylvania, a legislative agency of the Pennsylvania General Assembly.

The Center for Rural Pennsylvania is a bipartisan, bicameral legislative agency that serves as a resource for rural policy within the Pennsylvania General Assembly. It was created in 1987 under Act 16, the Rural Revitalization Act, to promote and sustain the vitality of Pennsylvania's rural and small communities.

A copy of the full report is available by contacting the Center for Rural Pennsylvania at 200 North Third St., Suite 600, Harrisburg, PA 17101, telephone (717) 787-9555, fax (717) 772-3587, www.ruralpa.org, or by emailing info@ruralpa.org.

Table of Contents

Introduction	4
Project Justification and Literature Review	4
Review of Goals and Objectives	5
Research Methodology	6
Results	6
Descriptive Statistics Results	7
Analytical Model Results	18
A. Employment	18
B. Income	18
C. Business Establishments	18
Conclusion	18
Recommendations	19

Tables

Table 1 – DCED Program Expenditures, 1987-1999	7
Table 1A – Rankings of DCED Programs by Size of Expenditures, Rural Counties, 1987-1999	8
Table 1B – Rankings of DCED Programs by Size of Expenditures, Urban Counties, 1987-1999	9
Table 2 – Annual Program Expenditures	10
Table 3 – Annual Distribution of Total Program Dollars Between Rural and Urban Counties	10
Table 4 – Annual Program Expenditures For Each Program – All Rural Counties, 1987-1999	11
Table 5 – Annual Program Expenditures For Each Program – All Urban Counties, 1987-1999	13
Table 6 – Total Program Dollars by County, 1987-1999	14
Table 6A – Average Annual Program Dollars Per Capita by County, 1987-1999	16

Charts

Chart 1 – DCED Program Expenditures	10
Chart 2 – Annual Distribution of Total DCED Program Dollars Between Rural and Urban Counties	11

INTRODUCTION

Pennsylvania spends hundreds of millions of dollars each year on a variety of programs designed to stimulate economic development and increase the well being of the state's citizens. To learn more about the relative effectiveness of these programs, researchers from East Stroudsburg University of Pennsylvania, through a grant from the Center for Rural Pennsylvania, conducted a study of all of the economic development programs administered by the state Department of Community and Economic Development (DCED) from 1987 to 1999. The purpose of the study was to determine the effectiveness of these programs in generating income, employment, and business growth. A listing of the programs studied is on page 5.

Researchers C.A.Christofides, Todd Behr, and Pats Neelakantan, focused on three aspects of economic development that are theoretically sound and analyzed how the various development programs rank in achieving economic development goals.

For the study, economic development is defined as a general increase in the living standards of a region. Since living standards are directly related to employment and earnings, researchers use growth in *per capita income*, *the number of jobs*, and *the number of business establishments* as proxies for economic development. All three measures were used in this study to determine the effectiveness of state run economic development programs. The researchers employed appropriate statistical techniques to control for other factors that can affect growth, such as population density, industry structure, and other national variables. They also determined which economic development programs are the most successful in achieving specific end results desired by decision-makers.

Overall, the four main goals of the study were to:

A) Develop a Statistical Database: Develop a comprehensive statistical database containing the total amount spent by each state development program for each of Pennsylvania's 67 counties from 1987 to 1999. Include in the final database other relevant economic and demographic statistics for each county over the same period.

B) Develop Summary Statistics: List the total amounts spent by each DCED incentive program and rank the counties by the amounts of development aid received from DCED programs during the 13-year period.

C) Develop Statistical Evaluation of Program Effectiveness: Provide estimates of the statistical relationship between county economic development and the various economic incentive programs by using a stepwise regression procedure.

D) Develop Program Rankings and Policy Recommendations: Provide decision-makers, who must promote county economic development, with information that may help them to decide which programs to promote to achieve a desired objective. Caution should be exercised

however, because some programs that are statistically insignificant may still serve specific purposes for a small number of counties and may address unique problems and provide useful solutions.

For the purpose of the research, counties where 50 percent or more of the population was rural according to the 1990 Decennial Census (the most current data available) were considered rural. The remaining counties were considered urban.

PROJECT JUSTIFICATION AND LITERATURE REVIEW

Is taxpayer money well spent? No one will deny that certain rural counties in the state have consistently had lower levels and lower growth rates of employment, earnings, and business formations. The key question is: Do state economic development programs actually alleviate these problems? A literature review of the effectiveness of state tax incentive and expenditure incentive programs suggests that they can. The effectiveness of such programs was determined by measuring their impact on county income, employment and business growth.

However, given the current environment of federal cutbacks to the states in certain areas and growing taxpayer concern over the ways dollars are spent, it is legitimate to ask which of the specific development programs have the greatest economic impact. For example, from the literature reviews mentioned above, the researchers found that, dollar for dollar, state expenditure programs are frequently more effective than tax incentive programs in stimulating economic development.

A recent performance review of DCED programs by KPMG Peat Marwick LLP (*Performance Review: Department of Commerce Economic Development Programs, A Report in Response to House Resolution 25*, December 1995), for example, showed that some programs were more effective than others in creating jobs and generating rapid wage increases.

In this regard, the KPMG Peat Marwick report, along with similar performance reviews of other state programs published by the Pennsylvania Legislative Budget and Finance Committee, are valuable resources to analysts who are conducting research on Pennsylvania's economic development programs.

These reports, however, are not comprehensive reviews of all of the state's development programs. In addition, the perspective of the performance reviews is at the state level, which may mask differences in the way programs are implemented at the county level.

Other studies examined for the literature review did not specifically apply to Pennsylvania. They also included numerous data and methodological problems. One should therefore exercise caution in reading too much into many of these studies.

REVIEW OF GOALS AND OBJECTIVES

The first goal of the study was to collect, organize, and classify data that was used in the analytical part of the project. Researchers began by constructing a database, which consists of the total dollar amounts spent by each state development program offered by DCED for which the data is available during the 13 years from 1987 to

1999. The researchers also determined the allocation of program expenditures by county over the same time period. While the study set out to include all DCED programs, two programs, the Ben Franklin Partnership (BFP) and Small Business Development Corporation (SBDC), could not be included in the analysis due to data limitations. The second data set consists of economic and

DCED Programs Included in Study

AQIF: Air Quality Improvement Fund – loans to administer provisions of the Clean Air Act.

BID: Business Infrastructure Development – loans and grants to local sponsors for infrastructure improvements needed by private companies locating or expanding in Pennsylvania.

CDBG: Community Development Block Grant Program – grant program to help generate economic development and infrastructure to aid urban areas and municipalities with a large percentage of low-income residents.

CERP: Community Economic Recovery Program – grant program to help economically distressed communities identify and respond to opportunities for business growth and to help develop the local capacity to plan and implement economic recovery strategies.

CFP: Community Facilities Program – matching grants to small municipalities (under 12,000 people) to improve water and sewer systems to make the areas more attractive to job-producing private investment or to improve the health and safety of the community.

CJT: Customized Job Training – grant program to assist businesses in training their employees in new skills and technology.

COMMOP: Communities of Opportunity – grant program to help provide housing for low-income renters and to remedy blighted urban conditions.

CRP: Community Revitalization Program – grants program to assist economically disadvantaged communities.

EOAP: Employee-Ownership Assistance Program – grants for technical assistance in the form of feasibility studies to employee-ownership groups that seek to retain or create jobs by restructuring an existing or starting a new business as an employee-owned enterprise.

EZP: Enterprise Zone Program – grant program to aid communities in developing projects that would stimulate investment and help to create jobs in state-designated zones.

ICAP & ICSP: Industrial Communities Action Program & Industrial Communities Site Program – similar programs which provide loans (ICAP) and grants (ICSP) to local communities to help facilitate the redevelopment of blighted industrial land and restore dormant manufacturing and industrial sites.

MELF: Machinery and Equipment Loan Fund – loan program to help stimulate growth and retain businesses by providing low-interest financing focused on machinery and equipment acquisition. The loans are to be used by businesses that would otherwise have difficulty in obtaining funding.

NAP: Neighborhood Assistance Program – tax credit program to businesses that provide funding or in-kind services to support community development and service projects in economically distressed neighborhoods.

PCLF: Pennsylvania Capital Loan Fund – loan program that provides low-interest financing to small businesses in conjunction with equity, bank financing, or other private and public sources to help small businesses (100 employees or less) create and retain jobs.

PORTS: PennPorts – appropriations to three major ports of Erie, Pittsburgh, and Philadelphia.

PIDA & PIDA RET: Pennsylvania Industrial Development Authority – loans to increase job creation and retention through fostering business retention and expansion. The PIDA loans are provided to local Industrial Development Corporations (IDC) across the state in order to make available low-cost capital loans to businesses in their respective areas for business expansion activities. PIDA RET refers to loans for job retention.

PMBDA: Pennsylvania Minority Business Development Authority – low-cost loans to help develop minority businesses.

RIDA: Recycling Incentive Development Account – loan program to explore new technologies and provide capital to recycling companies and end-users of recycled materials.

SAF: Set Aside Fund – grant program for municipalities and redevelopment authorities to help economically distressed areas, primarily through development of infrastructure.

SDP: Site Development Program – a match-grant program designed to promote employment through the development of infrastructure.

STLF: Storage Tank Loan Fund – loan program to help correct tank problems and alleviate problems that may result in job losses, business closures, or an impaired business climate.

SUNNY: Sunny Day Fund – primarily a loan fund that is used to attract large job-creation and investment projects.

demographic statistics for each county in the state during the same 13 years.

The next goal was to tabulate the data and derive a series of summary statistics to get a broad perspective of the state's development programs. Specifically, the intention was to prepare tables that will show county participation rates in the development programs for each year during the last 13 years. This has enabled the researchers to determine which counties received the largest and smallest amounts of development aid in any given year and whether these rankings changed over time. Another objective was to prepare tables that show the size of each development program relative to the total size of all development programs for each year during the last 13 years. This allowed for the determination of growth rates for each program, how state officials have viewed the relative importance of each program, and whether the program is gaining or losing its importance over time.

The third goal was to apply statistical techniques to evaluate the relative effectiveness of each program in meeting a series of performance measures. MINITAB software was used to estimate a number of equations, which allowed the researchers to determine which programs were the most effective in creating jobs, raising per capita income, and increasing the number of business establishments. In addition, the researchers determined which programs have long-term effects on economic development and how long the effects were sustained.

The last and, perhaps, most important goal was to rank the programs in order of effectiveness in achieving specific outcomes. Finally, policy recommendations were offered.

RESEARCH METHODOLOGY

The database was created in spreadsheets, which include all counties in rows and economic development programs in columns. Each cell indicates the amount of money spent by that county under a given program. A spreadsheet has been constructed for each of the 13 study years. From the spreadsheets, the researchers calculated the number of counties participating in each given program in each given year, the average amount spent by each county on development initiatives over the years, and growth of specific programs over time. The next step was to evaluate these programs and rank them according to their economic contribution and statistical significance.

To measure the impact of various programs and other related variables, a series of reduced form regressions were estimated. The basic premise of this model was that county growth depends on national economic trends, county characteristics, and economic development programs.

The researchers estimated a pooled, cross-section regression model. This model is preferable to other available models, including panel regressions, because it gives more robust estimates and the best predictive

ability. Additionally, a log-log functional specification was chosen as the best model specification, and since different programs may have different objectives, several performance criteria such as per capita income, employment, and number of business establishments were used in evaluating and ranking economic development programs. Using the above-mentioned statistical approach, the researchers developed a model for each of the performance measures.

The main intent was to check what impact economic development programs have on these outcomes. Since many factors affect these outcomes, the study results include appropriate variables in the model to control for the following factors:

- **National Factors:** It is well established in the literature that national factors affect county performance and, hence, a set of national factors like Gross Domestic Product, interest rates, etc. were included in the model to control for their influence on the county.

- **County Factors:** Since county characteristics can also influence economic performance, variables like population density, labor force participation rate, and industry structure were included in the model to net out their effects.

Finally, and the most important of all, each economic development program was represented by a different variable to separate its specific impacts on county development.

Using the above statistical model, the researchers controlled for key factors that can influence growth and measured the contribution of each economic development program to specific performance outcomes, such as employment, per capita income, and business establishments. The empirical results from this step have helped to achieve the next objective, namely, to rank economic development programs for specific performance outcomes. These rankings were based on the estimated coefficients of the regressions and their levels of significance.

RESULTS

This study was conducted to develop a comprehensive database containing information on the total amounts spent by DCED on economic development programs during the last 13 years and to evaluate the relative effectiveness of all those programs.

The study has accomplished, for the most part, both of these objectives and has attained a number of other specific results. In the following sections, these results are discussed under two broad categories: Descriptive Statistics Results and Analytical Model Results. Numerous charts and summary tables enhance the key findings of the study. Subsequently, these results lead to conclusions and policy recommendations.

Goals Achieved Beyond the Scope of the Project:

Additional results have been achieved in the Descrip-

tive Statistics section. For example, a rural-urban breakdown of each DCED program was performed to measure the percentage of the total dollar amounts for each program going to urban or rural counties. Also, a group of tables was created showing how each individual DCED program was distributed across counties. A third result was the individual county receipts of DCED aid arranged by program and by year, showing the relative importance of each program to each of the 67 counties in Pennsylvania. (Note: The last two sets of data mentioned above are included in the full report, which is available by contacting the Center for Rural Pennsylvania.)

The most important goal achieved beyond the scope of the study was the development of a comprehensive methodological ranking procedure. This has allowed the researchers to gradually evaluate the effects of every DCED program on all counties and to use objective

statistical criteria for determining which programs have been effective contributors to county economic growth.

Descriptive Statistics Results

Researchers met with officials from DCED and the Departments of Education, Health, Labor and Industry, Revenue, Transportation and Welfare to determine which state programs may directly contribute to economic development.

As a result of the meetings, data were collected on a number of programs administered by DCED. Since the statistical analysis used required county-level data, one should recognize that the study does not capture the impact of every DCED program. Nevertheless, the researchers were able to obtain information on a number of important programs as shown in Table 1. This table lists the DCED county expenditures for the programs

TABLE 1 – DCED PROGRAM EXPENDITURES, 1987-1999

Effective in Generating Employment	Effective in Generating income	Effective in Generating Establishments	Rank by Program Size	Program	Totals	Program Expenditures as a Percentage of Total Program Expenditures	Average Program Expenditures Per County
L		L	1	PIDA	\$990,721,327	45.8%	\$14,786,885
			2	SUNNY	\$219,725,000	10.2%	\$3,279,478
G	G	G	3	CJT	\$145,790,704	6.7%	\$2,175,981
		L&G	4	BID	\$132,255,113	6.1%	\$1,973,957
L		L	5	MELF	\$124,948,969	5.8%	\$1,864,910
L	L	L	6	PCLF	\$100,286,726	4.6%	\$1,496,817
			7	CRP	\$89,447,205	4.1%	\$1,335,033
			8	PIDA RET	\$73,269,689	3.4%	\$1,093,577
			9	ICSP	\$52,646,328	2.4%	\$785,766
			10	GDBG - Gr	\$48,745,139	2.3%	\$727,539
G		G	11	CFP	\$31,596,954	1.5%	\$471,596
L	L	L	12	PMBDA	\$28,512,538	1.3%	\$425,560
			13	NAP	\$23,065,170	1.1%	\$344,256
			14	COMMOP	\$22,836,566	1.1%	\$340,844
			15	CERP	\$10,046,000	0.5%	\$149,940
			16	SDP	\$9,787,412	0.5%	\$146,081
		L	17	ICAP	\$9,717,779	0.4%	\$145,041
			18	EZCOMP	\$9,627,224	0.4%	\$143,690
			19	CDBG-DIS	\$8,946,869	0.4%	\$133,535
			20	NAPEZP	\$6,779,242	0.3%	\$101,183
			21	RIDA	\$6,051,432	0.3%	\$90,320
			22	NAPCSP	\$5,114,050	0.2%	\$76,329
			23	AQIF	\$2,918,283	0.1%	\$43,556
L		L	24	STLF	\$2,136,138	0.1%	\$31,883
			25	PORTS	\$2,000,000	0.1%	\$29,851
			26	EZBASIC	\$1,600,001	0.1%	\$23,881
	G		27	EOAP	\$1,319,553	0.1%	\$19,695
			28	SAF	\$959,359	0.0%	\$14,319
				TOTALS	\$2,160,850,770	100.0%	\$32,251,504

L = loan programs

G = grant programs

Note: All figures are in “current” dollars, i.e., unadjusted for inflation.

examined for 1987 to 1999. It should be noted that some of the programs did not exist for the entire time period covered by the study. It is easy to see that PIDA was the largest program over this period, accounting for approximately 46 percent of the dollars used in the programs studied. PIDA was also one of the more effective pro-

grams in terms of creating jobs and helping to start business establishments.

Next, the researchers separated the data into rural and urban groupings to find if the rankings would remain the same. A comparison of Table 1, Table 1A, and Table 1B shows that there are some similarities and many differences in the rankings between rural and urban counties.

TABLE 1A – RANKINGS OF DCED PROGRAMS BY SIZE OF EXPENDITURES, RURAL COUNTIES, 1987-1999

Effective in Generating Employment	Effective in Generating Income	Effective in Generating Establishments	Rank by Program Size	Program	Program Expenditures for All Rural Counties	Rural Program Expenditures as a Percent Of All Rural Program Expenditures	Rural Program Expenditures as a Percent of Total Program Expenditures
L		L	1	PIDA	\$223,565,172	41.9%	22.6%
L&G		L&G	2	BID	\$51,176,499	9.6%	38.7%
L	L		3	MELF	\$46,831,507	8.8%	37.5%
L		L	4	PCLF	\$36,960,643	6.9%	36.9%
			5	CDBG - Gr	\$31,924,350	6.0%	65.5%
			6	CJT	\$30,358,665	5.7%	20.8%
G		G	7	CFP	\$20,438,542	3.8%	64.7%
			8	SUNNY	\$20,000,000	3.8%	9.1%
L		L	9	PIDA RET	\$15,792,594	3.0%	21.6%
			10	CRP	\$12,651,645	2.4%	14.1%
			11	ICSP	\$10,622,960	2.0%	20.2%
			12	CDBG-DIS	\$6,586,879	1.2%	73.6%
			13	COMMOP	\$6,147,761	1.2%	26.9%
G		G	14	CERP	\$4,122,800	0.8%	41.0%
			15	SDP	\$4,042,015	0.8%	41.3%
			16	EZCOMP	\$2,983,792	0.6%	31.0%
			17	ICAP	\$1,755,500	0.3%	18.1%
		L	18	PMBDA	\$1,536,000	0.3%	5.4%
			19	NAP	\$1,339,288	0.3%	5.8%
			20	NAPEZP	\$1,031,300	0.2%	15.2%
			21	RIDA	\$957,682	0.2%	15.8%
L		L	22	STLF	\$551,824	0.1%	25.8%
			23	EOAP	\$548,330	0.1%	41.6%
			24	EZBASIC	\$436,667	0.1%	27.3%
			25	AQIF	\$416,823	0.1%	14.3%
			26	SAF	\$345,676	0.1%	36.0%
			27	NAPCSP	\$0	0.0%	0.0%
			28	PORTS	\$0	0.0%	0.0%
				TOTALS	\$533,124,914	100.0%	24.7%

G = grant programs

L = loan programs

While in some cases, such as with PMBDA and PORTS, the reasons are fairly obvious, further study is required to determine the reasons for these differences.

It is also worth noting that, even though rural counties received only 25 percent of total program dollars, some of the programs that were the most effective in generat-

ing favorable outcomes among rural counties received a larger percentage of total program dollars. Specifically, BID (39 percent), MELF (38 percent), PCLF (37 percent), CFP (65 percent) and CERP (41 percent) each spent a relatively large percentage of that particular program's total expenditure in rural counties.

TABLE 1B – RANKINGS OF DCED PROGRAMS BY SIZE OF EXPENDITURES, URBAN COUNTIES, 1987-1999

Effective in Generating Employment	Effective in Generating Income	Effective in Generating Establishments	Rank by Program Size	Program	Urban Program		
					Program Expenditures for All Urban Counties	Expenditures as a Percent of All Urban Program Expenditures	Urban Program Expenditures as a Percent of Total Program Expenditures
L		L	1	PIDA	\$767,156,155	47.1%	77.4%
			2	SUNNY	\$199,725,000	12.3%	90.9%
G		G	3	CJT	\$115,432,039	7.1%	79.2%
	L&G		4	BID	\$81,078,614	5.0%	61.3%
L		L	5	MELF	\$78,117,462	4.8%	62.5%
			6	CRP	\$76,795,560	4.7%	85.9%
L	L	L	7	PCLF	\$63,326,083	3.9%	63.1%
			8	PIDA RET	\$57,477,095	3.5%	78.4%
			9	ICSP	\$42,023,368	2.6%	79.8%
L	L	L	10	PMBDA	\$26,976,538	1.7%	94.6%
			11	NAP	\$21,725,882	1.3%	94.2%
			12	CDBG - Gr	\$16,820,789	1.0%	34.5%
			13	COMMOP	\$16,688,805	1.0%	73.1%
G		G	14	CFP	\$11,158,412	0.7%	35.3%
L		L	15	ICAP	\$7,962,279	0.5%	81.9%
			16	EZCOMP	\$6,643,432	0.4%	69.0%
			17	CERP	\$5,923,200	0.4%	59.0%
			18	NAPEZP	\$5,747,942	0.4%	84.8%
G		G	19	SDP	\$5,745,397	0.4%	58.7%
			20	NAPCSP	\$5,114,050	0.3%	100.0%
			21	RIDA	\$5,093,750	0.3%	84.2%
			22	AQIF	\$2,501,460	0.2%	85.7%
			23	CDBG-DIS	\$2,359,990	0.1%	26.4%
			24	PORTS	\$2,000,000	0.1%	100.0%
			25	STLF	\$1,584,314	0.1%	74.2%
			26	EZBASIC	\$1,163,334	0.1%	72.7%
			27	EOAP	\$771,223	0.0%	58.4%
			28	SAF	\$613,683	0.0%	64.0%
				TOTALS	\$1,627,725,856	100.0%	75.3%

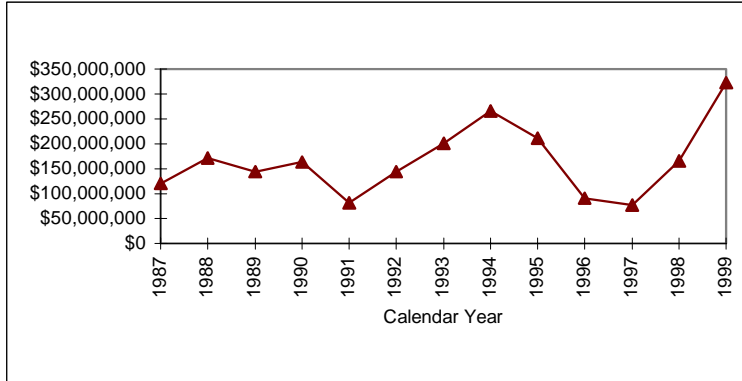
L = loan programs

G = grant programs

Distribution of Program Dollars Over Time

Chart 1 and Table 2 show how program dollars were distributed over time. It appears that spending fell dramatically in the recession year of 1991 and once again in 1995 and 1996.

CHART 1 – DCED PROGRAM EXPENDITURES



**TABLE 2
ANNUAL PROGRAM EXPENDITURES**

Year	Annual Program Expenditures	Annual Program Expenditures as a Percent of Total Program Expenditures
1987	\$120,599,200	5.6%
1988	\$171,742,135	7.9%
1989	\$143,757,870	6.7%
1990	\$163,708,765	7.6%
1991	\$81,475,364	3.8%
1992	\$144,393,480	6.7%
1993	\$200,929,056	9.3%
1994	\$265,675,720	12.3%
1995	\$211,195,879	9.8%
1996	\$91,381,031	4.2%
1997	\$77,109,121	3.6%
1998	\$166,399,781	7.7%
1999	\$322,483,368	14.9%
	\$2,160,850,770	100.0%

**TABLE 3
ANNUAL DISTRIBUTION OF TOTAL PROGRAM DOLLARS
BETWEEN RURAL AND URBAN COUNTIES**

Year	Rural	Urban	Total	Percent of	Percent of
				All Program Dollars Going to Rural Counties	All Program Dollars Going to Urban Counties
1987	\$30,232,045	\$90,367,155	\$120,599,200	25.1%	74.9%
1988	\$50,417,962	\$121,324,173	\$171,742,135	29.4%	70.6%
1989	\$43,435,325	\$100,322,545	\$143,757,870	30.2%	69.8%
1990	\$34,765,389	\$128,943,376	\$163,708,765	21.2%	78.8%
1991	\$19,416,607	\$62,058,757	\$81,475,364	23.8%	76.2%
1992	\$40,899,286	\$103,494,194	\$144,393,480	28.3%	71.7%
1993	\$40,296,771	\$160,632,285	\$200,929,056	20.1%	79.9%
1994	\$53,381,397	\$212,294,323	\$265,675,720	20.1%	79.9%
1995	\$59,711,530	\$151,484,349	\$211,195,879	28.3%	71.7%
1996	\$23,221,698	\$68,159,333	\$91,381,031	25.4%	74.6%
1997	\$17,327,324	\$59,781,797	\$77,109,121	22.5%	77.5%
1998	\$30,564,072	\$135,835,709	\$166,399,781	18.4%	81.6%
1999	\$89,455,508	\$233,027,860	\$322,483,368	27.7%	72.3%
	\$533,124,914	\$1,627,725,856	\$2,160,850,770	24.7%	75.3%

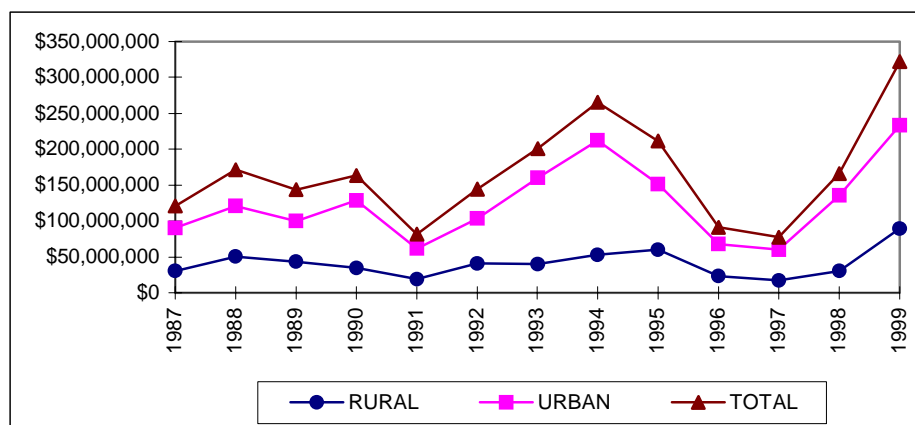
Distribution of Total Program Dollars Between Rural and Urban Counties

Table 3 and Chart 2 show the annual distribution of total program dollars between rural and urban counties. For the entire period covered by the study, rural counties received approximately 25 percent of the total program dollars, while urban counties received approximately 75 percent, although there were significant variations by year. The low point for rural counties occurred in 1998 when they received only 18 percent of program dollars, and the high point occurred in 1989 when they received 30 percent.

Although the data presented so far features the combined effects of all the programs that were examined, the purpose of the study was to examine the effectiveness of each program at the county level. Therefore, it was necessary to determine program allocation for each county and for each year of the study. (*Note: County tables are included in the full report, which is available from the Center for Rural Pennsylvania.*)

In addition, it is interesting to note how the distribution of expenditures for each program differed between rural and urban counties over time. Table 4 shows the distribution for rural counties and Table 5 shows the distribution for urban counties.

**CHART 2 – ANNUAL DISTRIBUTION OF TOTAL DCED PROGRAM DOLLARS
BETWEEN RURAL AND URBAN COUNTIES**



**TABLE 4 – PART 1
ANNUAL PROGRAM EXPENDITURES FOR EACH PROGRAM – ALL RURAL COUNTIES, 1987-1994**

YEAR	1987	1988	1989	1990	1991	1992	1993	1994
AQIF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BID	\$4,815,152	\$7,724,253	\$7,162,528	\$10,799,791	\$514,995	\$6,294,823	\$7,239,723	\$5,893,000
CDBG-DIS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GDBG - Gr	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CERP	\$495,000	\$464,000	\$463,000	\$520,800	\$358,000	\$410,000	\$755,000	\$447,000
CFP	\$3,701,553	\$4,753,073	\$5,033,618	\$2,762,491	\$1,114,000	\$939,420	\$670,762	\$558,000
CJT	\$4,214,098	\$1,871,874	\$3,637,232	\$2,475,426	\$850,365	\$1,375,905	\$1,260,504	\$1,518,330
COMMOP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CRP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EOAP	\$90,000	\$50,000	\$0	\$95,162	\$23,168	\$125,000	\$50,000	\$105,000
EZBASIC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EZCOMP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ICAP	\$0	\$0	\$0	\$360,500	\$250,000	\$0	\$700,000	\$445,000
ICSP	\$0	\$0	\$0	\$500,000	\$483,093	\$2,239,629	\$915,500	\$6,484,738
MELF	\$0	\$0	\$1,950,000	\$3,021,620	\$2,411,950	\$4,793,000	\$4,747,800	\$2,690,000
NAP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NAPCSP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NAPEZP	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PCLF	\$3,434,892	\$4,885,347	\$4,859,193	\$4,434,780	\$2,499,620	\$3,886,647	\$1,865,615	\$3,217,563
PORTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PIDA	\$12,838,913	\$25,756,320	\$19,798,028	\$9,385,932	\$10,233,055	\$18,256,740	\$17,732,747	\$19,473,402
PIDA RET	\$0	\$0	\$0	\$0	\$0	\$1,563,854	\$1,792,145	\$4,259,262
PMBDA	\$95,000	\$50,000	\$75,000	\$156,000	\$200,000	\$110,000	\$0	\$0
RIDA	\$0	\$0	\$0	\$145,000	\$0	\$614,082	\$81,600	\$117,000
SAF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$245,676
SDP	\$547,437	\$1,363,095	\$456,726	\$107,887	\$478,361	\$260,186	\$444,000	\$144,148
STLF	\$0	\$0	\$0	\$0	\$0	\$30,000	\$41,375	\$283,278
SUNNY	\$0	\$3,500,000	\$0	\$0	\$0	\$0	\$2,000,000	\$7,500,000
TOTALS	\$30,232,045	\$50,417,962	\$43,435,325	\$34,765,389	\$19,416,607	\$40,899,286	\$40,296,771	\$53,381,397

(Table 4 continued on next page.)

TABLE 4 -CONTINUED
ANNUAL PROGRAM EXPENDITURES FOR EACH PROGRAM – ALL RURAL COUNTIES, 1995-1999

YEAR	1995	1996	1997	1998	1999	1987-1999
AQIF	\$80,651	\$336,172	\$0	\$0	\$0	\$416,823
BID	\$732,234	\$0	\$0	\$0	\$0	\$51,176,499
CDBG-DIS	\$0	\$0	\$0	\$1,375,000	\$5,211,879	\$6,586,879
GDBG - Gr	\$0	\$0	\$0	\$0	\$31,924,350	\$31,924,350
CERP	\$210,000	\$0	\$0	\$0	\$0	\$4,122,800
CFP	\$905,625	\$0	\$0	\$0	\$0	\$20,438,542
CJT	\$1,798,369	\$2,508,491	\$2,796,864	\$1,938,319	\$4,112,888	\$30,358,665
COMMOP	\$0	\$0	\$0	\$649,495	\$5,498,266	\$6,147,761
CRP	\$0	\$0	\$0	\$1,809,970	\$10,841,675	\$12,651,645
EOAP	\$10,000	\$0	\$0	\$0	\$0	\$548,330
EZBASIC	\$0	\$0	\$0	\$100,000	\$336,667	\$436,667
EZCOMP	\$0	\$0	\$0	\$1,416,740	\$1,567,052	\$2,983,792
ICAP	\$0	\$0	\$0	\$0	\$0	\$1,755,500
ICSP	\$0	\$0	\$0	\$0	\$0	\$10,622,960
MELF	\$4,051,000	\$2,360,000	\$3,177,945	\$8,165,165	\$9,463,027	\$46,831,507
NAP	\$0	\$0	\$0	\$320,813	\$1,018,475	\$1,339,288
NAPCSP	\$0	\$0	\$0	\$0	\$0	\$0
NAPEZP	\$0	\$0	\$0	\$500,000	\$531,300	\$1,031,300
PCLF	\$6,661,886	\$1,215,100	\$0	\$0	\$0	\$36,960,643
PORTS	\$0	\$0	\$0	\$0	\$0	\$0
PIDA	\$30,741,590	\$16,404,764	\$10,055,182	\$14,288,570	\$18,599,929	\$223,565,172
PIDA RET	\$6,580,000	\$300,000	\$1,297,333	\$0	\$0	\$15,792,594
PMBDA	\$500,000	\$0	\$0	\$0	\$350,000	\$1,536,000
RIDA	\$0	\$0	\$0	\$0	\$0	\$957,682
SAF	\$100,000	\$0	\$0	\$0	\$0	\$345,676
SDP	\$240,175	\$0	\$0	\$0	\$0	\$4,042,015
STLF	\$100,000	\$97,171	\$0	\$0	\$0	\$551,824
SUNNY	\$7,000,000	\$0	\$0	\$0	\$0	\$20,000,000
TOTALS	\$59,711,530	\$23,221,698	\$17,327,324	\$30,564,072	\$89,455,508	\$533,124,914

TABLE 5 – ANNUAL PROGRAM EXPENDITURES FOR EACH PROGRAM – ALL URBAN COUNTIES, 1987-1993

YEAR	1987	1988	1989	1990	1991	1992	1993
AQIF	\$0	\$0	\$0	\$0	\$0	\$0	\$0
BID	\$11,451,530	\$15,662,248	\$9,471,621	\$8,973,119	\$5,665,119	\$4,346,395	\$10,321,180
CDBG-DIS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
GDBG - Gr	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CERP	\$320,000	\$601,000	\$461,500	\$789,200	\$473,500	\$820,000	\$889,000
CFP	\$1,692,877	\$1,991,392	\$2,417,788	\$1,431,720	\$735,337	\$1,038,130	\$799,238
CJT	\$8,409,175	\$9,681,315	\$7,900,974	\$5,609,647	\$2,674,286	\$4,817,831	\$5,654,448
COMMOP	\$0	\$0	\$0	\$0	\$0	\$0	\$0
CRP	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EOAP	\$124,200	\$0	\$76,500	\$19,670	\$127,500	\$166,832	\$116,521
EZBASIC	\$0	\$0	\$0	\$0	\$0	\$0	\$0
EZCOMP	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ICAP	\$0	\$0	\$0	\$2,916,067	\$875,000	\$0	\$2,430,131
ICSP	\$0	\$0	\$0	\$12,228,963	\$6,850,105	\$4,552,300	\$6,100,000
MELF	\$0	\$0	\$2,280,015	\$1,109,145	\$3,103,500	\$5,231,000	\$9,988,400
NAP	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NAPCSP	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NAPEZP	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PCLF	\$4,379,502	\$10,870,817	\$6,126,955	\$5,753,925	\$4,856,897	\$6,056,363	\$4,568,634
PORTS	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PIDA	\$57,553,108	\$53,506,502	\$69,183,903	\$47,029,466	\$33,097,013	\$49,284,705	\$66,055,882
PIDA RET	\$0	\$0	\$0	\$0	\$0	\$9,111,658	\$8,634,589
PMBDA	\$1,957,925	\$2,516,750	\$1,979,745	\$2,726,375	\$3,050,500	\$3,418,500	\$6,472,000
RIDA	\$0	\$0	\$0	\$300,000	\$200,000	\$340,500	\$250,000
SAF	\$0	\$0	\$0	\$0	\$0	\$0	\$110,000
SDP	\$478,838	\$2,994,149	\$323,544	\$556,089	\$350,000	\$220,000	\$493,137
STLF	\$0	\$0	\$0	\$0	\$0	\$89,980	\$224,125
SUNNY	\$4,000,000	\$23,500,000	\$100,000	\$39,500,000	\$0	\$14,000,000	\$37,525,000
TOTALS	\$90,367,155	\$121,324,173	\$100,322,545	\$128,943,376	\$62,058,757	\$103,494,194	\$160,632,285

TABLE 5 - CONTINUED, 1994-1999

YEAR	1994	1995	1996	1997	1998	1999	1987-1999
AQIF	\$1,164,479	\$901,046	\$380,030	\$55,905	\$0	\$0	\$2,501,460
BID	\$10,240,838	\$4,400,000	\$546,564	\$0	\$0	\$0	\$81,078,614
CDBG-DIS	\$0	\$0	\$0	\$0	\$350,270	\$2,009,720	\$2,359,990
GDBG - Gr	\$0	\$0	\$0	\$0	\$0	\$16,820,789	\$16,820,789
CERP	\$999,000	\$570,000	\$0	\$0	\$0	\$0	\$5,923,200
CFP	\$460,555	\$591,375	\$0	\$0	\$0	\$0	\$11,158,412
CJT	\$4,760,035	\$3,712,191	\$9,996,644	\$13,522,576	\$10,520,305	\$28,172,612	\$115,432,039
COMMOP	\$0	\$0	\$0	\$0	\$5,313,250	\$11,375,555	\$16,688,805
CRP	\$0	\$0	\$0	\$0	\$13,397,743	\$63,397,817	\$76,795,560
EOAP	\$125,000	\$15,000	\$0	\$0	\$0	\$0	\$771,223
EZBASIC	\$0	\$0	\$0	\$0	\$276,667	\$886,667	\$1,163,334
EZCOMP	\$0	\$0	\$0	\$0	\$2,190,000	\$4,453,432	\$6,643,432
ICAP	\$859,800	\$881,281	\$0	\$0	\$0	\$0	\$7,962,279
ICSP	\$10,208,500	\$2,083,500	\$0	\$0	\$0	\$0	\$42,023,368
MELF	\$8,042,000	\$7,940,600	\$7,830,300	\$5,262,500	\$12,665,000	\$14,665,002	\$78,117,462
NAP	\$0	\$0	\$0	\$0	\$9,308,550	\$12,417,332	\$21,725,882
NAPCSP	\$0	\$0	\$0	\$0	\$1,695,000	\$3,419,050	\$5,114,050
NAPEZP	\$0	\$0	\$0	\$0	\$897,805	\$4,850,137	\$5,747,942
PCLF	\$7,688,769	\$10,035,612	\$2,988,609	\$0	\$0	\$0	\$63,326,083
PORTS	\$0	\$0	\$0	\$0	\$0	\$2,000,000	\$2,000,000
PIDA	\$86,400,596	\$83,026,506	\$38,334,802	\$36,652,816	\$78,471,119	\$68,559,747	\$767,156,155
PIDA RET	\$18,189,120	\$10,258,162	\$6,995,566	\$4,288,000	\$0	\$0	\$57,477,095
PMBDA	\$1,467,500	\$2,067,750	\$569,493	\$0	\$750,000	\$0	\$26,976,538
RIDA	\$853,250	\$2,850,000	\$300,000	\$0	\$0	\$0	\$5,093,750
SAF	\$282,300	\$221,383	\$0	\$0	\$0	\$0	\$613,683
SDP	\$329,640	\$0	\$0	\$0	\$0	\$0	\$5,745,397
STLF	\$622,941	\$429,943	\$217,325	\$0	\$0	\$0	\$1,584,314
SUNNY	\$59,600,000	\$21,500,000	\$0	\$0	\$0	\$0	\$199,725,000
TOTALS	\$212,294,323	\$151,484,349	\$68,159,333	\$59,781,797	\$135,835,709	\$233,027,860	\$1,627,725,856

Finally, classifying program expenditures by rural and urban totals can be misleading because individual counties received more or less program dollars than the average. Table 6 shows how total program dollars were allocated to each county for the 1987-1999 period.

TABLE 6 – TOTAL PROGRAM DOLLARS BY COUNTY, 1987-1999

Rank	County	Rural/Urban	Totals for All Programs	Average Per Year	Percent of All Program Expenditures
1	Philadelphia	u	\$ 206,632,845	\$15,894,834	9.6%
2	Allegheny	u	\$ 203,799,581	\$15,676,891	9.4%
3	Luzerne	u	\$ 121,521,830	\$9,347,833	5.6%
4	Erie	u	\$ 82,150,302	\$6,319,254	3.8%
5	Lackawanna	u	\$ 81,503,466	\$6,269,497	3.8%
6	Chester	u	\$ 78,781,650	\$6,060,127	3.6%
7	Westmoreland	u	\$ 76,378,132	\$5,875,241	3.5%
8	Bucks	u	\$ 71,584,584	\$5,506,506	3.3%
9	Berks	u	\$ 66,955,697	\$5,150,438	3.1%
10	Beaver	u	\$ 64,644,272	\$4,972,636	3.0%
11	Blair	u	\$ 59,231,007	\$4,556,231	2.7%
12	York	u	\$ 57,591,817	\$4,430,140	2.7%
13	Montgomery	u	\$ 57,313,840	\$4,408,757	2.7%
14	Northampton	u	\$ 55,362,585	\$4,258,660	2.6%
15	Cambria	u	\$ 49,174,509	\$3,782,655	2.3%
16	Lancaster	u	\$ 43,841,353	\$3,372,412	2.0%
17	Schuykill	r	\$ 42,919,045	\$3,301,465	2.0%
18	Franklin	r	\$ 38,235,668	\$2,941,205	1.8%
19	Washington	u	\$ 38,111,004	\$2,931,616	1.8%
20	Lycoming	u	\$ 36,100,156	\$2,776,935	1.7%
21	Mercer	u	\$ 35,610,079	\$2,739,237	1.6%
22	Dauphin	u	\$ 34,946,609	\$2,688,201	1.6%
23	Lehigh	u	\$ 34,458,243	\$2,650,634	1.6%
24	Fayette	r	\$ 34,114,032	\$2,624,156	1.6%
25	Centre	u	\$ 29,520,924	\$2,270,840	1.4%
26	Butler	r	\$ 28,715,431	\$2,208,879	1.3%
27	Delaware	u	\$ 28,506,555	\$2,192,812	1.3%
28	Crawford	r	\$ 28,218,695	\$2,170,669	1.3%
29	Clearfield	r	\$ 26,634,982	\$2,048,845	1.2%
30	McKean	r	\$ 23,680,300	\$1,821,562	1.1%
31	Cumberland	u	\$ 22,405,717	\$1,723,517	1.0%
32	Monroe	r	\$ 20,884,315	\$1,606,486	1.0%
33	Huntingdon	r	\$ 20,294,381	\$1,561,106	0.9%
34	Northumberland	r	\$ 18,255,800	\$1,404,292	0.8%

(Table 6 continued on next page.)

TABLE 6 – CONTINUED: TOTAL PROGRAM DOLLARS BY COUNTY, 1987-1999

Rank	County	Rural/Urban	Totals for All Programs	Average Per Year	Percent of All Program Dollars
35	Clinton	r	\$ 17,862,547	\$1,374,042	0.8%
36	Bedford	r	\$ 16,174,683	\$1,244,206	0.7%
37	Elk	r	\$ 15,185,622	\$1,168,125	0.7%
38	Armstrong	r	\$ 14,655,193	\$1,127,323	0.7%
39	Venango	r	\$ 14,623,767	\$1,124,905	0.7%
40	Indiana	r	\$ 14,304,251	\$1,100,327	0.7%
41	Lawrence	r	\$ 13,715,405	\$1,055,031	0.6%
42	Jefferson	r	\$ 12,790,770	\$983,905	0.6%
43	Mifflin	r	\$ 10,694,757	\$822,674	0.5%
44	Grenne	r	\$ 10,122,736	\$778,672	0.5%
45	Lebanon	r	\$ 10,090,218	\$776,171	0.5%
46	Columbia	r	\$ 9,818,204	\$755,246	0.5%
47	Carbon	u	\$ 8,953,378	\$688,721	0.4%
48	Bradford	r	\$ 8,440,357	\$649,258	0.4%
49	Somerset	r	\$ 7,516,880	\$578,222	0.3%
50	Clarion	r	\$ 6,500,054	\$500,004	0.3%
51	Warren	r	\$ 6,132,763	\$471,751	0.3%
52	Tioga	r	\$ 6,087,782	\$468,291	0.3%
53	Cameron	r	\$ 5,639,713	\$433,824	0.3%
54	Snyder	r	\$ 3,881,471	\$298,575	0.2%
55	Wyoming	r	\$ 3,852,225	\$296,325	0.2%
56	Susquehanna	r	\$ 3,327,102	\$255,931	0.2%
57	Adams	r	\$ 3,126,497	\$240,500	0.1%
58	Fulton	r	\$ 2,999,985	\$230,768	0.1%
59	Union	r	\$ 2,984,572	\$229,582	0.1%
60	Potter	r	\$ 2,892,745	\$222,519	0.1%
61	Wayne	r	\$ 2,325,386	\$178,876	0.1%
62	Pike	r	\$ 2,176,429	\$167,418	0.1%
63	Juniata	r	\$ 1,993,437	\$153,341	0.1%
64	Montour	r	\$ 1,180,052	\$90,773	0.1%
65	Sullivan	r	\$ 946,214	\$72,786	0.0%
66	Forest	r	\$ 942,173	\$72,475	0.0%
67	Perry	r	\$ 833,996	\$64,154	0.0%
	Total		\$ 2,160,850,770		
	Average			\$2,480,885	1.5%

The data in Table 6 seems to imply that rural counties receive the fewest program dollars. This ranking may be somewhat misleading however, because urban counties have larger populations. Therefore, program dollars received by each county were adjusted according to the county's population, and this information is presented in Table 6A. As can be seen, some rural counties have actually received significantly larger amounts of program money on a per capita basis.

TABLE 6A – AVERAGE ANNUAL PROGRAM DOLLARS PER CAPITA BY COUNTY, 1987-1999

Annual Program Expenditures Per Capita 1987-1999 *				Annual Program Expenditures Per Capita 1987-1999 *		
County	Urban/Rural	Capita	Rank	County	Urban/Rural	Capita
Adams	r	\$2.97	1	Cameron	r	\$74.87
Allegheny	u	\$11.98	2	McKean	r	\$38.74
Armstrong	r	\$15.26	3	Clinton	r	\$37.00
Beaver	u	\$26.65	4	Huntingdon	r	\$34.96
Bedford	r	\$25.48	5	Blair	u	\$34.79
Berks	u	\$14.94	6	Elk	r	\$33.28
Blair	u	\$34.79	7	Lackawanna	u	\$29.10
Bradford	r	\$10.52	8	Luzerne	u	\$28.83
Bucks	u	\$9.67	9	Beaver	u	\$26.65
Butler	r	\$13.79	10	Clearfield	r	\$25.82
Cambria	u	\$23.51	11	Bedford	r	\$25.48
Cameron	r	\$74.87	12	Crawford	r	\$24.71
Carbon	u	\$12.08	13	Franklin	r	\$23.72
Centre	u	\$17.84	14	Cambria	u	\$23.51
Chester	u	\$15.46	15	Lycoming	u	\$23.34
Clarion	r	\$11.95	16	Erie	u	\$22.78
Clearfield	r	\$25.82	17	Mercer	u	\$22.54
Clinton	r	\$37.00	18	Schuykill	r	\$21.80
Columbia	r	\$11.92	19	Jefferson	r	\$21.21
Crawford	r	\$24.71	20	Grenne	r	\$19.17
Cumberland	u	\$8.59	21	Venango	r	\$19.16
Dauphin	u	\$11.00	22	Fayette	r	\$18.02
Delaware	u	\$4.02	23	Centre	u	\$17.84
Elk	r	\$33.28	24	Mifflin	r	\$17.70
Erie	u	\$22.78	25	Northampton	u	\$16.81
Fayette	r	\$18.02	26	Fulton	r	\$16.27
Forest	r	\$14.97	27	Westmoreland	u	\$15.75
Franklin	r	\$23.72	28	Chester	u	\$15.46
Fulton	r	\$16.27	29	Armstrong	r	\$15.26
Grenne	r	\$19.17	30	Forest	r	\$14.97
Huntingdon	r	\$34.96	31	Berks	u	\$14.94
Indiana	r	\$12.27	32	Northumberland	r	\$14.65
Jefferson	r	\$21.21	33	Monroe	r	\$14.45
Juniata	r	\$7.11	34	Washington	u	\$14.25
Lackawanna	u	\$29.10	35	Butler	r	\$13.79
Lancaster	u	\$7.58	36	Potter	r	\$13.15
Lawrence	r	\$11.00	37	York	u	\$12.47
Lebanon	r	\$6.69	38	Indiana	r	\$12.27
Lehigh	u	\$8.98	39	Carbon	u	\$12.08
Luzerne	u	\$28.83	40	Sullivan	r	\$12.05
Lycoming	u	\$23.34	41	Allegheny	u	\$11.98

TABLE 6A -CONTINUED
AVERAGE ANNUAL PROGRAM DOLLARS PER CAPITA BY COUNTY, 1987-1999

Annual Program Expenditures Per				Annual Program Expenditures Per		
County	Urban/Rural	Capita	Rank	County	Urban/Rural	Capita
		1987-1999 *				1987-1999 *
McKean	r	\$38.74	42	Clarion	r	\$11.95
Mercer	u	\$22.54	43	Columbia	r	\$11.92
Mifflin	r	\$17.70	44	Tioga	r	\$11.32
Monroe	r	\$14.45	45	Philadelphia	u	\$11.06
Montgomery	u	\$6.34	46	Lawrence	r	\$11.00
Montour	r	\$5.15	47	Dauphin	u	\$11.00
Northampton	u	\$16.81	48	Warren	r	\$10.57
Northumberland	r	\$14.65	49	Bradford	r	\$10.52
Perry	r	\$1.47	50	Wyoming	r	\$10.17
Philadelphia	u	\$11.06	51	Bucks	u	\$9.67
Pike	r	\$4.54	52	Lehigh	u	\$8.98
Potter	r	\$13.15	53	Cumberland	u	\$8.59
Schuykill	r	\$21.80	54	Snyder	r	\$8.04
Snyder	r	\$8.04	55	Lancaster	u	\$7.58
Somerset	r	\$7.28	56	Somerset	r	\$7.28
Sullivan	r	\$12.05	57	Juniata	r	\$7.11
Susquehanna	r	\$6.25	58	Lebanon	r	\$6.69
Tioga	r	\$11.32	59	Montgomery	u	\$6.34
Union	r	\$5.71	60	Susquehanna	r	\$6.25
Venango	r	\$19.16	61	Union	r	\$5.71
Warren	r	\$10.57	62	Montour	r	\$5.15
Washington	u	\$14.25	63	Pike	r	\$4.54
Wayne	r	\$4.21	64	Wayne	r	\$4.21
Westmoreland	u	\$15.75	65	Delaware	u	\$4.02
Wyoming	r	\$10.17	66	Adams	r	\$2.97
York	u	\$12.47	67	Perry	r	\$1.47
Average		\$16.56		Average		\$16.56

** Calculated by dividing county program dollars by county population for each year and then averaging this ratio for the years 1987-1999.*

Once again, it should be noted that this study is not intended to explain why these funding patterns occurred. However, the study attempts to explain how individual programs affected county employment growth, growth of per capita income, and growth in the number of business establishments. The next section examines these outcomes in greater detail.

Analytical Model Results

As described in the previous sections, the analytical model estimated a large number of equations using a stepwise regression procedure. Each estimated equation became progressively more significant as national and local variables were added to the various DCED programs. The main findings are listed and explained below. For each of the three economic development measures, DCED programs are listed in order of impact beginning with the highest. All were statistically significant at the 95 percent confidence level unless otherwise noted. Data cover the time period from 1987 to 1999.

A. Employment

The following seven programs statistically had the greatest impact on county employment levels:

1. PIDA: The Pennsylvania Industrial Development Authority was enacted to reduce unemployment in critical economic areas of the state by providing for economic development projects. This study confirms that the objectives of PIDA can be justified statistically, and that these types of programs have been significant contributors to the growth of county employment. PIDA also contributed to growth in the number of businesses.

2. STLF: The Storage Tank Loan Fund was designed to help replace tanks considered environmentally risky by the EPA. The economic objective of this program was to alleviate problems, which may otherwise result in job losses. It seems that such a program has statistically contributed significant gains in county employment. STLF also contributed to growth of income and business establishments.

3. CFP: The Community Facilities Program provides matching grants to small municipalities to improve their water and sewer systems. Even though these programs appear to have no specific job creation intentions, statistics show that they have contributed to county employment growth over the years. CFP also contributed to business growth.

4. CJT: The Customized Job Training Act was designed to improve the skills of workers and develop the skills of certain target groups of unemployed persons. The objective of these programs, which seems to be statistically justified, was to reduce structural unemployment. CJT also contributed to growth of income and business establishments.

5. PCLF: The Pennsylvania Capital Loan Fund provides low-interest financing to small businesses to help create and retain jobs. The job creation and job retention functions of such programs appear to have been successful based on the results of the analytical model. PCLF also contributed to growth of income and business establishments.

6. PMBDA: The Pennsylvania Minority Business Development Authority provides loans to minority-owned

businesses for land, building, machinery, and equipment acquisitions. Statistics show that these programs have made significant contributions to county employment growth. PMBDA also contributed to growth of income and business establishments.

7. MELF: The Machinery and Equipment Loan Fund was created to help stimulate growth and retain businesses by providing low-interest financing for machinery and equipment acquisitions. These initiatives have contributed statistically significant gains in county employment.

B. Income

The following five programs have been identified as the most significant contributors to county per capita income:

1. EOAP: The Employee-Ownership Assistance Program has as its main objective to pursue business survival through employee ownership. This program has proven to be statistically significant as a major contributor to the growth of county per capita income. (significant with 90 percent confidence)

2. PMBDA: (See description under *A. Employment*)

3. PCLF: (See description under *A. Employment*)

4. CJT: (See description under *A. Employment*)

5. STLF: (See description under *A. Employment*) (significant at less than 90 percent confidence)

C. Business Establishments

The following seven DCED programs made the most significant contributions to business growth as measured by the total number of business establishments in each county:

1. CFP: (See description under *A. Employment*)

2. PIDA: (See description under *A. Employment*)

3. STLF: (See description under *A. Employment*)

4. PMBDA: (See description under *A. Employment*)

5. PCLF: (See description under *A. Employment*)

6. CJT: (See description under *A. Employment*)

7. BID: The Business Infrastructure Development programs provide loans and grants for infrastructure improvements needed by companies locating or expanding in Pennsylvania. These programs are statistically significant in contributing to the growth of business establishments in Pennsylvania.

CONCLUSION

The following conclusions are based on the results of the analytical model:

1. A number of DCED programs have proven to be consistent contributors to economic growth as measured by county employment, per capita income, and the number of business establishments. PIDA, STLF, CFP, CJT, PCLF, PMBDA and MELF have contributed to at

least two out of the three measurements of county economic growth. Their contributions were verified at the 95 percent confidence level. These programs along with EOAP, which was identified as a contributor to county income only, and BID, which seemed to contribute only to county business growth were robust variables. Robust variables are simply those that the analytical model repeatedly identified as the most important contributors to economic growth. Based on these statistical criteria, it may be concluded that the above programs have indeed been the most effective economic development programs of those studied in this research.

2. PIDA, PCLF, STLF and CFP have been identified as the programs that have provided the most lasting effects on county economic growth. The programs showed that they were still influential when their values lagged by two or three years.

3. PCLF and ICAP were the programs most influential in the growth of urban counties even though CJT, PMBDA, PIDA, CFP, and CFT also seemed to be significant contributors.

4. The most important rural county contributors were CFP, MELF and PIDA RET even though PIDA, CERP, BID and STLF were also significant contributors.

RECOMMENDATIONS

The research findings of this report could potentially provide policy makers with strong evidence regarding the historical success of certain economic development programs. Caution should be exercised, however, in recommending that certain programs be chosen over others based solely on statistical evidence provided by this report. Statistical evidence represents important criteria for policy, but there are many other important criteria that should be considered before prudent and potentially successful policy is recommended. The purpose of this study is to report the findings, supported by formidable statistical evidence, on the relative success of DCED programs in an impartial, unbiased and objective manner. Programs excluded from the following list of recommendations are not necessarily ineffective. On the contrary, when the remaining programs were grouped and added to the equations, they contributed significantly to the explanatory power of each model. (In fact when the remaining programs were added to the employment equation, the R-square was boosted to 92.5 percent)

The following policy recommendations are based on the above conclusions, results and research findings:

1. All those DCED programs that have been identified as consistently and significantly contributing to county employment growth, namely, PIDA, STLF, CFP, CJT, PCLF, PMBDA and MELF, are recommended if the main objective of policy makers is to encourage county employment and job growth.

2. If the objective of policy is to increase county per capita income, the recommended programs are: EOAP, PMBDA, PCLF, CJT and STLF. These programs have been statistically identified as the most influential factors for growth of county per capita income.

3. The most influential variables in determining the number of business establishments in a county are: CFP, PIDA, STLF, PMBDA, CJT, BID, MELF and ICAP. Policy makers interested in encouraging the growth of business formation in a given region could recommend these programs.

4. For rural counties in particular, the most influential variables affecting employment growth were: CFP, STLF, PIDA RET, PIDA, CERP, BID, PCLF and MELF. It is interesting to note that even though STLF, PIDA RET, CERP and BID were not identified as significant contributors to urban county employment growth, they were influential in stimulating rural county employment growth. Therefore, if the intention of policy is to promote employment growth in rural counties the above programs should be recommended.

5. Rural per capita income was most influenced by MELF so this program should be supported if the policy goal is to increase income in rural areas.

6. The equation which estimated the relationship between rural business growth and DCED programs has determined that PIDA RET, CFP, STLF, PIDA, BID, PCLF, PMBDA, and CERP have had a statistically significant impact on the total number of business establishments in rural counties. Again, it is interesting to note that some of those programs appear to influence rural business growth but not urban business growth. The programs identified as more influential in promoting rural rather than urban business growth were: PIDA RET, STLF, BID and CERP. Policy makers interested in promoting the growth of business establishments in rural areas could therefore support such programs.

***The Center for Rural Pennsylvania
Board of Directors***

Representative Sheila Miller
Chairman

Dr. J. Dennis Murray
Mansfield University
Vice Chairman

Senator Mary Jo White
Treasurer

Dr. C. Shannon Stokes
The Pennsylvania State University
Secretary

Jody Bruckner
Governor's Representative

Dr. Stephan J. Goetz
Northeast Regional Center for Rural Development

Senator Michael A. O'Pake

Dr. Robert F. Pack
University of Pittsburgh

Dr. Craig D. Willis
Lock Haven University



The Center for Rural Pennsylvania

200 North Third St., Suite 600

Harrisburg, PA 17101

phone (717) 787-9555

fax (717) 772-3587

www.ruralpa.org

1P1101 - 1000