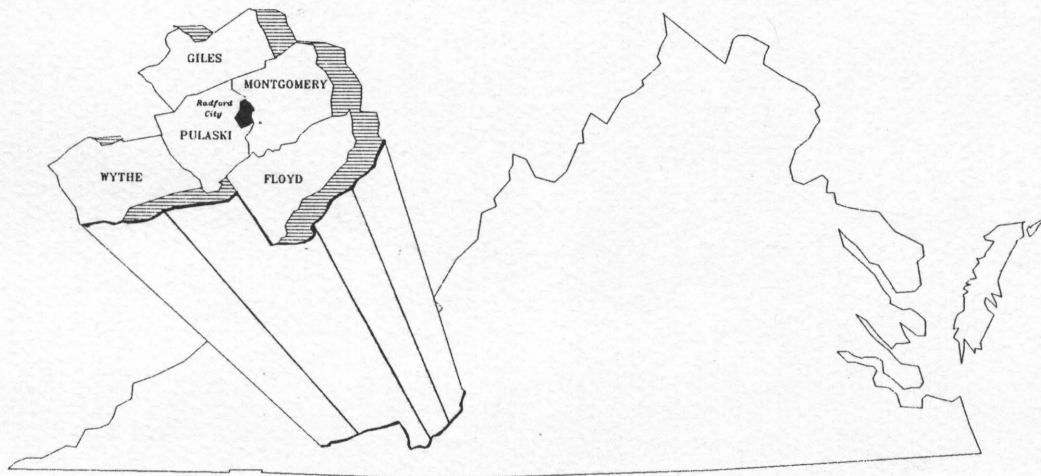


THE CLOSING OF AT&T'S FAIRLAWN PLANT: FISCAL AND ECONOMIC IMPACTS IN THE NEW RIVER VALLEY

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MARCH 1990



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The study that follows was conducted by Thomas G. Johnson, Associate Professor and Extension Specialist, CRD, and S. Murthy Kambhampaty, Research Assistant (Programmer), Department of Agricultural Economics. The study was developed at the request of Pulaski County. The conclusions and impacts presented in the study are a result of the methodologies and assumptions used by the researchers.

The conclusions, methodologies, and assumptions are the sole responsibility of the researchers and are not intended to reflect an official statement of CRD, VCES, or Virginia Tech.

The reader is urged to study the methodologies and assumptions in order to evaluate the conclusions.

The assistance of Mark D. Miller, Christy L. Broyles, and Joyce W. Smith was important to the final preparation of the report for publication.

J. Douglas McAlister
Assistant Director, VCES and
Director, Community Resource
Development Programs

I. INTRODUCTION AND ASSUMPTIONS

This study examines the impact of AT&T's announced closing of its Fairlawn Plant in Pulaski County on the New River Valley. Specifically, it seeks to examine the resulting changes in such conditions as employment, income, tax revenues, and public service expenditures, in Pulaski County and the neighboring counties, and the city of Radford. The study also examines the region-wide impacts of the closing.

Direct Changes Resulting from the Closing

The information obtained from AT&T, and the assumptions made in developing the scenarios, are summarized below.

1. Closing Date/Schedule: Employees are to be terminated starting no sooner than April 1990. It was assumed that the employee terminations, sale/removal of machinery and tools, etc., will be completed in calendar year 1990.
2. Change in Income (Salaries and Wages): The total reduction in payroll at the plant is \$24 million.
3. Commuting Patterns: The 951 employees of the plant come from the following places and in the numbers shown in Table 1.

**Table 1:
The Residence of Current AT&T Employees**

<u>County/City</u>	<u>Number</u>
Floyd Co.	24
Giles Co.	33
Wythe Co.	48
Montgomery Co.	305
Pulaski Co.	450
City of Radford	74
All others	<u>17</u>
TOTAL	951

4. Property and Property Taxes: The plant would continue to be owned by AT&T until a buyer or occupant is found, and hence the closing will not affect real property assessment and taxes.
5. Personal Property Taxes: All personal property (machine and tool), assessed at \$13,596,960, is to be removed from the plant, and hence the closing will result in a loss of property tax revenue to Pulaski County. This loss amounts to \$204,817 per annum.
6. Annual Output of the Plant: The annual value of output of the plant is assumed to be \$78,327,000.

II. REGIONAL ECONOMIC IMPACTS

The assumptions above were used to calculate the region-wide economic impacts of the closing using the IMPLAN regional input-output model. These regional economic impacts were then used, along with other direct changes, to estimate the fiscal impact for each jurisdiction in the New River Valley (plus Wythe County).

1. Change in Employment

The change in total employment for the region is determined by multiplying the change in employment due to the closing by the appropriate employment multiplier for the region. The employment multiplier for the communication equipment and electronic components sector in the region is obtained from the IMPLAN model as 1.64. The Communications Equipment & Electronic Components sector, is the sector in which the AT&T Plant is best classified. Thus the change in total employment in the NRV due to the closing is,

$$-951 \times 1.64 = 1558$$

Similarly, the change in total employment for Pulaski County is:

$$-951 \times 1.55 = 1475$$

where 1.64 and 1.55 are the sector's employment multipliers for the New River Valley and Pulaski County, respectively. The difference (1558-1475) = 83 employees, is distributed among the other localities to give the change in direct employment in the balance of the region. Table 2 shows some of the important industries of Pulaski County, and their employment multipliers for the county and for the region.

Table 2
**Employment Multipliers for Major Sectors
 in the New River Valley and Pulaski County**

<u>SECTOR</u>	<u>NRV</u>	<u>PULASKI</u>
Agriculture, Livestock	1.4315	1.3251
Logging & Wood Products	1.4829	1.3958
Comm. Equipment Electronic Components	1.6384	1.5509
Educational Services	1.2582	1.1896
Finance, Insurance, and Real Estate	1.6143	1.2870
Hotel & Restaurant	1.2563	1.1927
Personal Services	1.2871	1.2196
State & Local Government Services	1.2119	1.1565
Federal Govt. Services	1.2441	1.1842
Other Services	1.2867	1.1910

2. Change in Total Output

The change in total output in the New River Valley due to the closing is the product of the loss of output and the output multiplier for the relevant sector for the region. Thus, the change in total output in the New River Valley is:

$$= - \$ 78,327,000 \times 1.3915$$

$$= - \$108,992,000$$

3. Change in the Gross Regional Product (GRP)

The change in the GRP is the change in the value of goods and services, net of inputs, produced by firms located in the region. It is calculated by multiplying the change in sales by the value added per dollar of sales and then by the value added multiplier. This is calculated from the IMPLAN Model as follows:

$$\begin{aligned} & - \$ 78,327,000 \times 0.4015 \times 1.5767 \\ & = \$ 49,584,520 \end{aligned}$$

This change in the GRP is the best measure of the change in the region's economy as a result of the closing.

III. FISCAL IMPACT ANALYSIS

The development of fiscal impact scenarios for the localities being analyzed involves the identification of those conditions which will be affected as a consequence of the closing of AT&T's Fairlawn Plant. These changes must then be entered into the proper locations in the Virginia Impact Projection (VIP) Model, after which the model is run. The impacts can then be determined by comparing the results of this run with the "baseline." (The baseline describes the expected conditions if the economic situation continued as it has.) In this section, the development of fiscal impact scenarios for the localities is discussed. The scenarios for all jurisdictions will be discussed together, although they differ depending on their relationship to Pulaski County. The appendix includes graphical displays of changes in population, commuting patterns, labor force, employment, and other economic levels for Pulaski and Montgomery Counties. The changes in other jurisdictions were too small to show graphically.

1. Change in Total Employment

For each jurisdiction, the change in the total employment is the product of the direct change in employment and the employment multiplier. The multiplier for the AT&T Plant, which falls in the Communications Equipment and Electronic Components sector, is 1.55 for Pulaski County. Thus, as reported earlier, the change in total employment in Pulaski County is

$$\begin{aligned} & - 951 \times 1.5509 \\ & = - 1475 \end{aligned}$$

In other jurisdictions, the total change in employment is related to the difference between the Pulaski multiplier and the Valley-wide multiplier.

These jobs are distributed among the localities in the same proportions as the plant employees are distributed since this is the primary mechanism for this multiplier effect. For Montgomery County, for example, the change in total employment is:

$$= - 951 \times (1.6384 - 1.5509) \times (305/951)$$

$$= - 27$$

Total employment change in other counties and Radford are calculated similarly.

2. Change in Personal Property (Assessed Value) Per Capita. The change in the value of personal property lost when the plant removes its machinery and tools from Pulaski County was given as

$$- \$13,596,960$$

This number is divided by the county's population to give the change in the personal property per capita. No direct changes are anticipated in other counties other than that property owned by those who leave the area.

3. Change in Per Capita Income

The change in income in each county is determined as the product of the total change in payroll (- \$24 million) and the ratio of county employees of the plant (450 in Pulaski and 305 in Montgomery, for example) to the plant's total employees (951). This change is then divided by the county's population to give the change in per capita income. For Montgomery County the calculation is as follows:

$$= - \$24,000,000 \times (305/951)/\text{Population}$$

IV. SUMMARY OF FINDINGS

Pulaski County is the most seriously effected jurisdiction, followed by Montgomery County, Radford City, Wythe County, Giles County, and Floyd County. Table 3 lists the major impacts at the time of the closure.

Table 3:
Selected Fiscal and Economic Impacts of AT&T Closure

<u>Variable</u>	<u>Pulaski</u>	<u>Montg</u>	<u>Radford</u>	<u>Wythe</u>	<u>Giles</u>	<u>Floyd</u>
Pop	-250	-120	-144	-19	-13	-9
Out-Com	65	-241	-72	-38	-26	-19
In-Com	-910	-119	-5	-19	-13	-9
Employ	-1475	-27	-6	-4	-3	-2
Unem Rate	+2.2%	+ .3%	+1.9%	+ .1%	+ .1%	+ .1%
Fiscal Cost	\$520,000	\$330,000	\$50,000	\$60,000	\$40,000	\$28,000

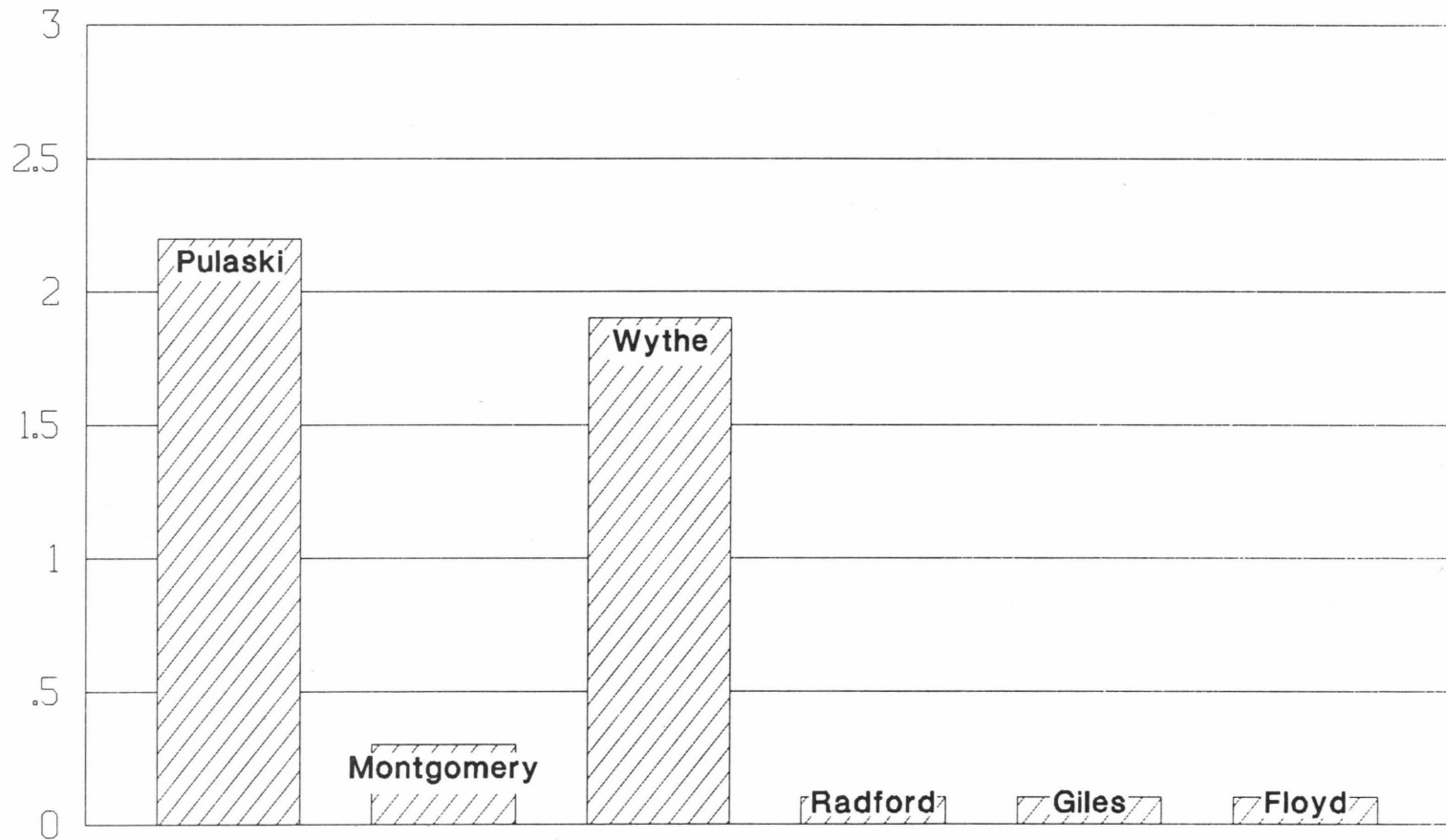
The total valley-wide impacts of the closure will include a loss of over 550 residents, 1560 jobs, and over a million dollars a year in fiscal resources (tax revenues, cost economies, estimated quality of service).

In addition, the models estimate that valley-wide income will be reduced by \$37 million, retail sales will be reduced approximately \$25 million, real property will be almost \$40 million less, and personal property almost \$17 million less than would otherwise be the case.

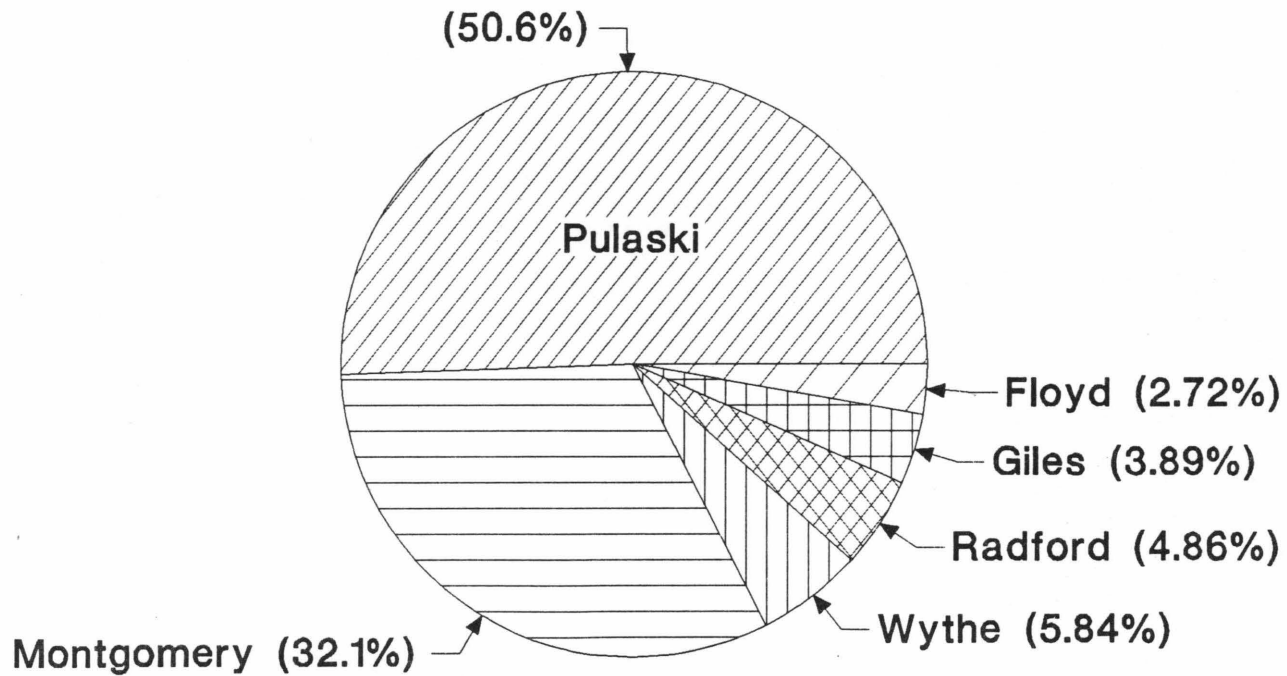
APPENDIX

THE CHARTS AND GRAPHS CONTAINED IN THIS SECTION
VISUALLY REPRESENT THE ECONOMIC IMPACTS OF THE AT&T
CLOSING ON PULASKI AND MONTGOMERY COUNTIES.

Increase in Unemployment Rates

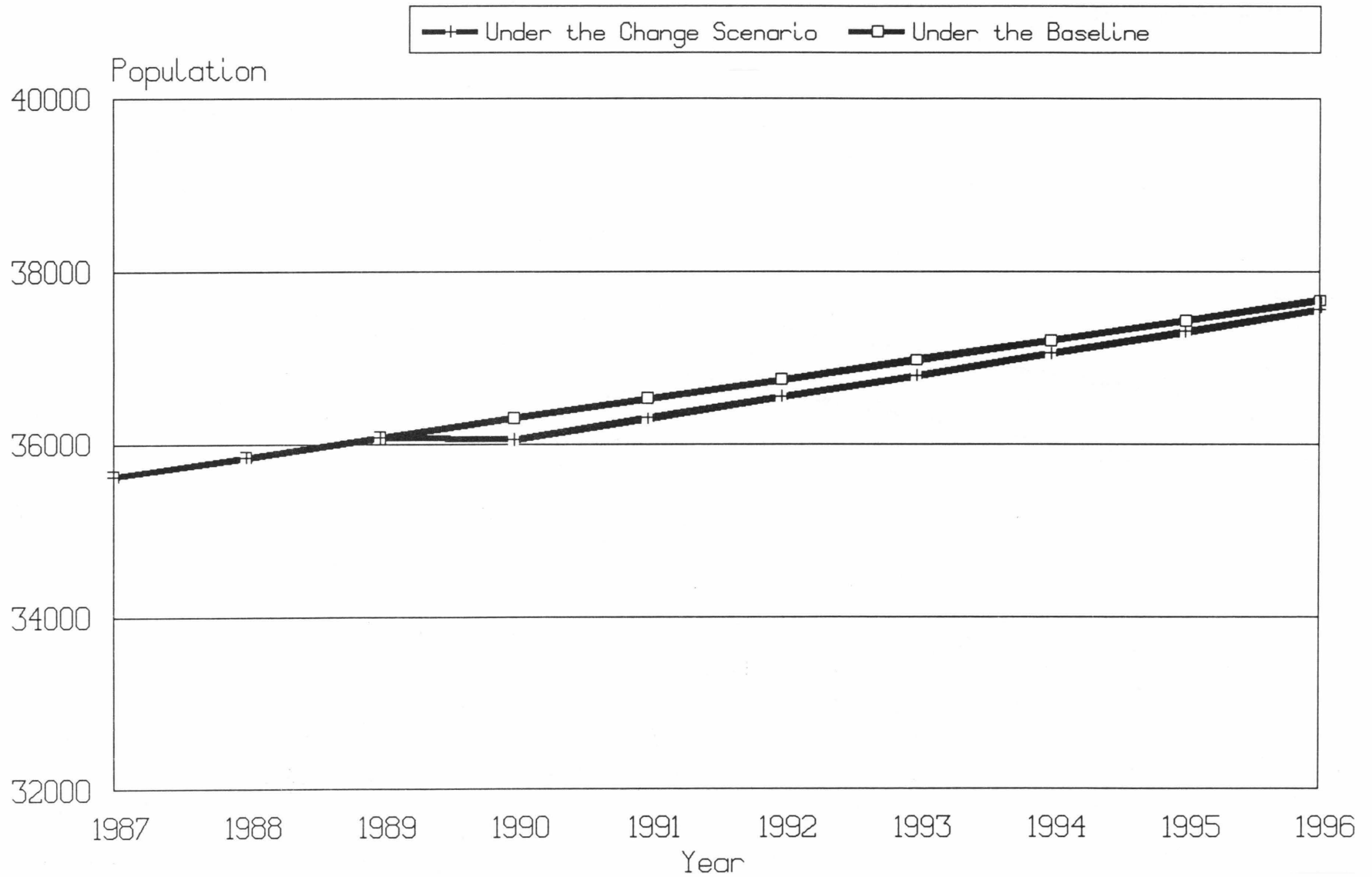


Fiscal Impact on New River Localities

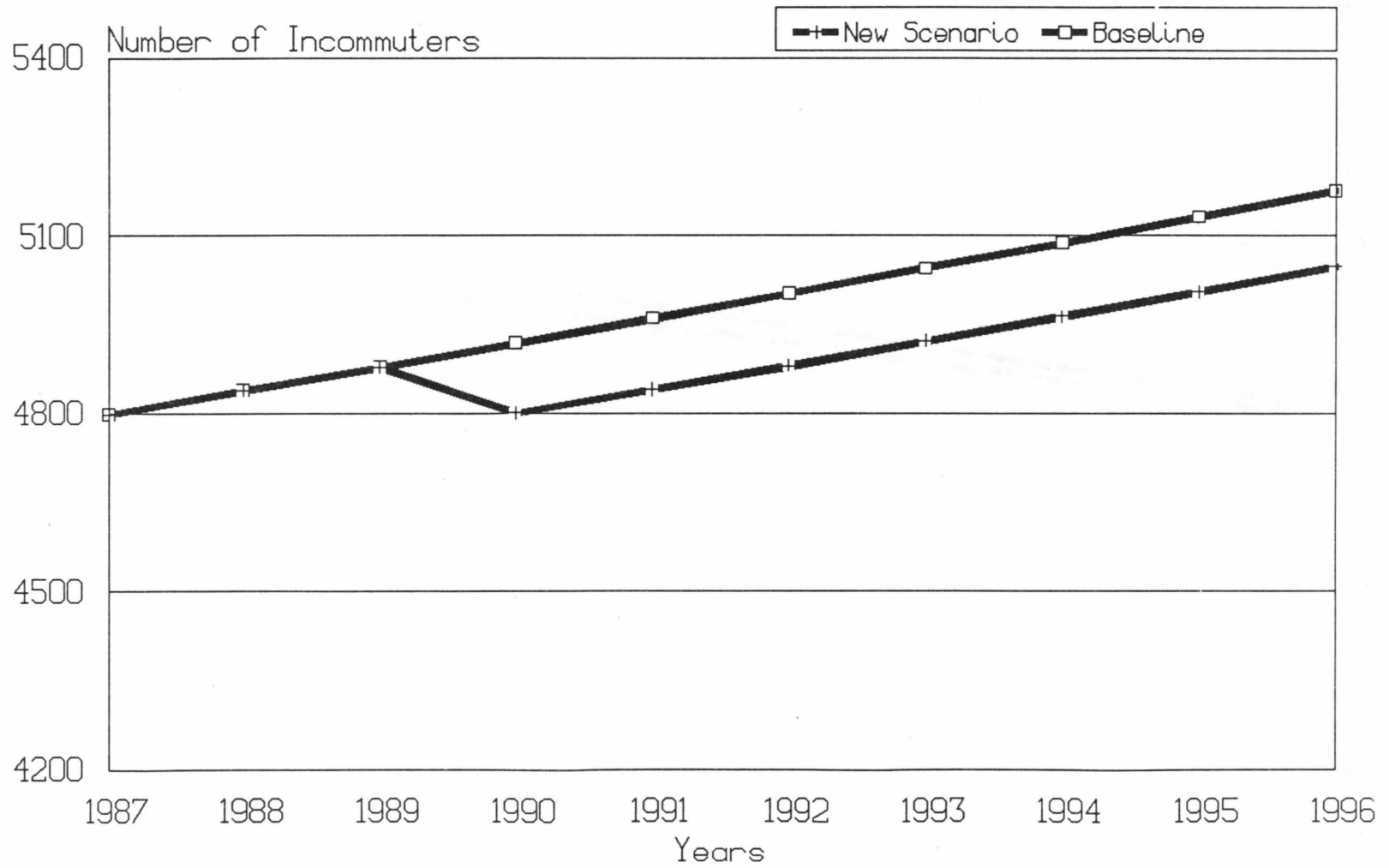


Measures increased fiscal stress

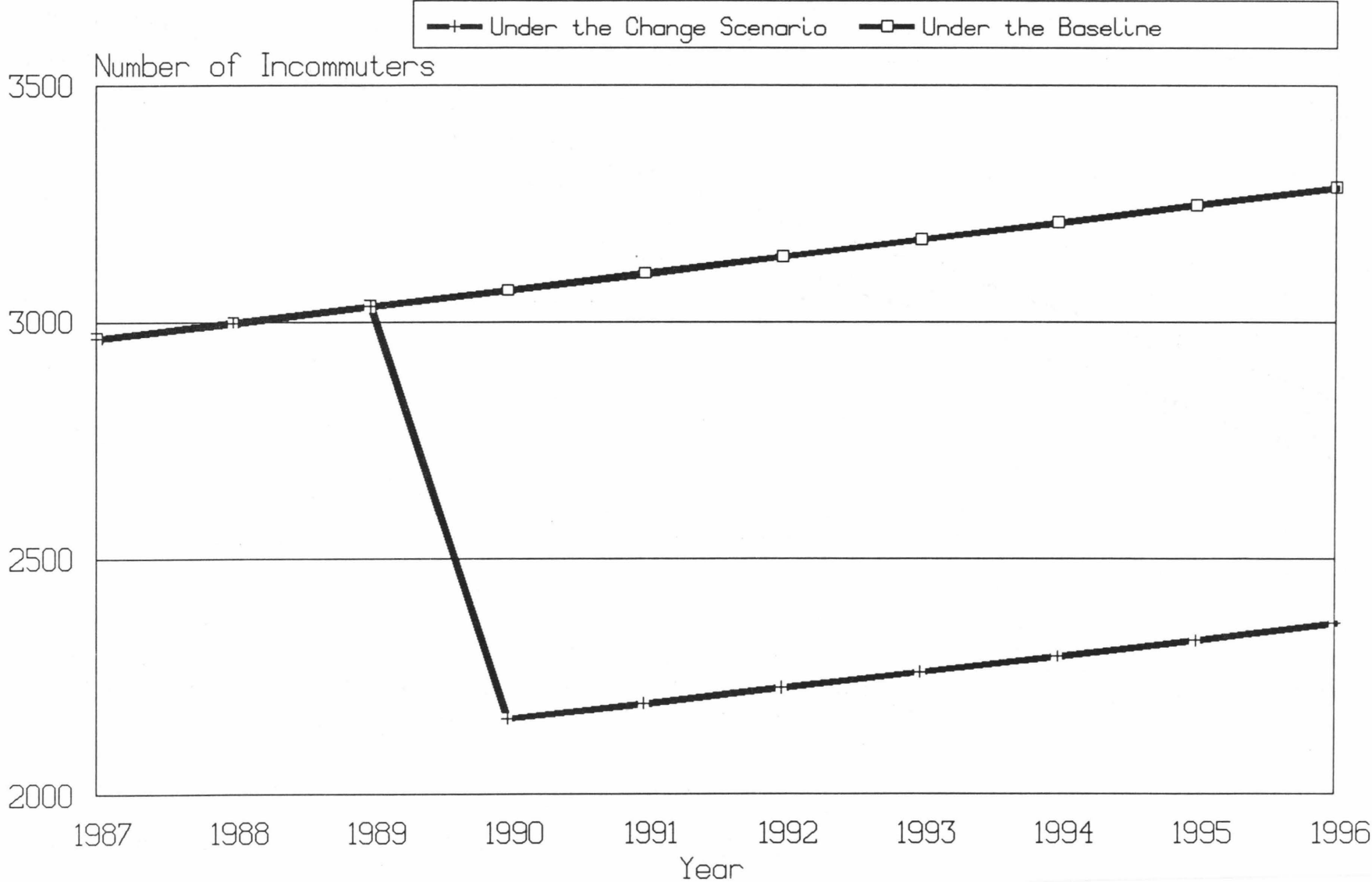
Impact of the AT&T Plant Closing Pulaski County



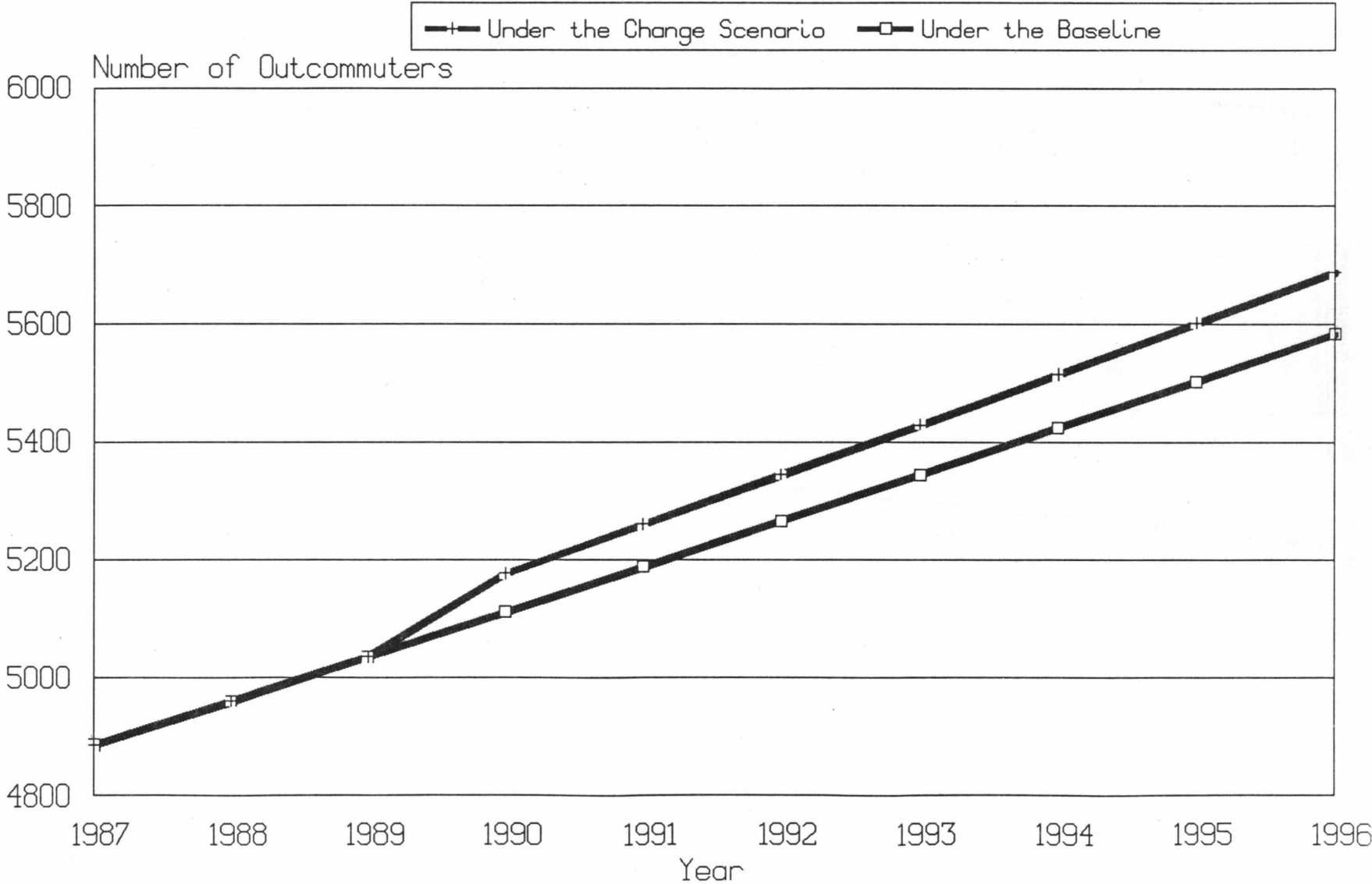
The Impact of the AT&T Plant Closing Montgomery County



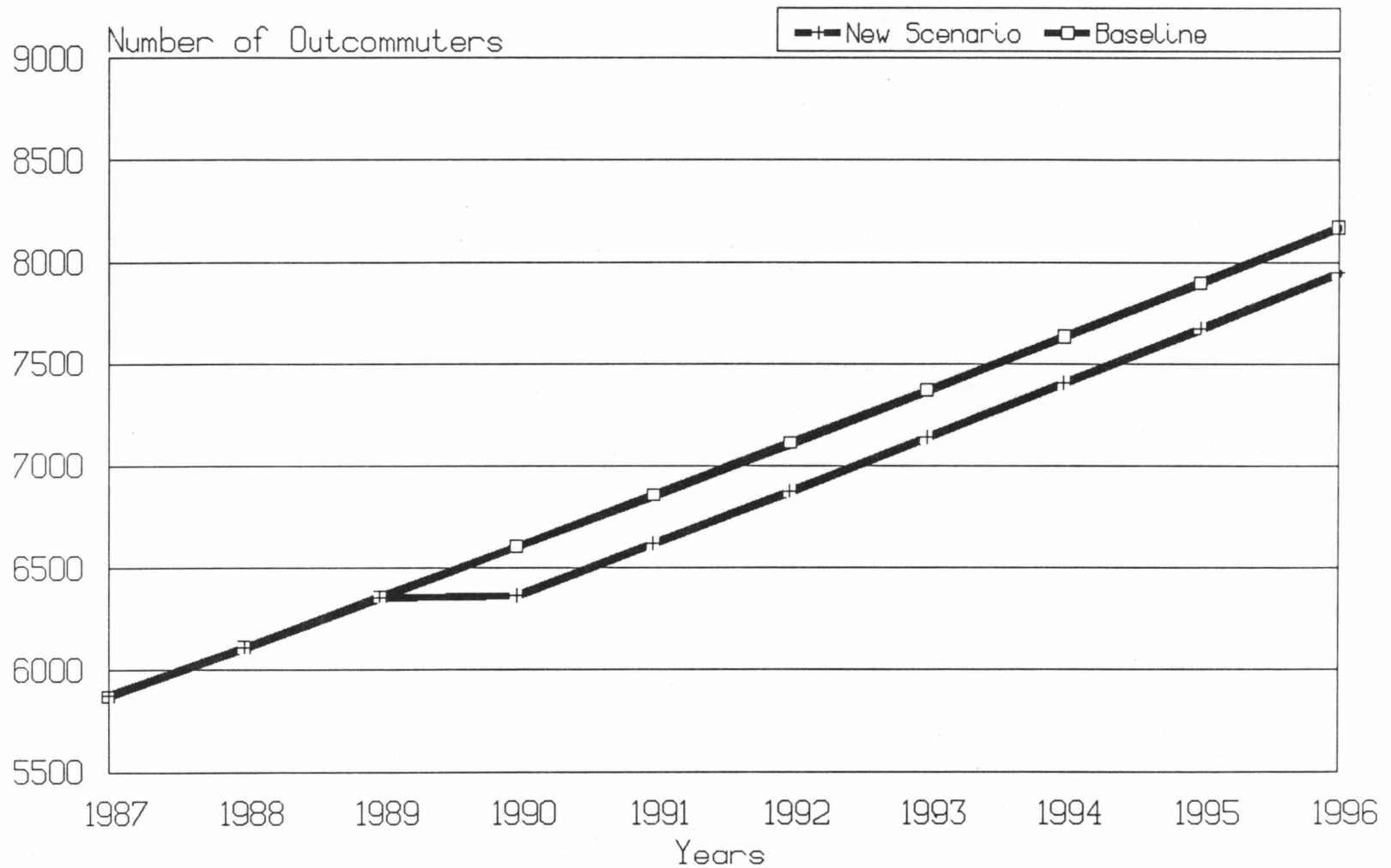
Impact of the AT&T Plant Closing Pulaski County



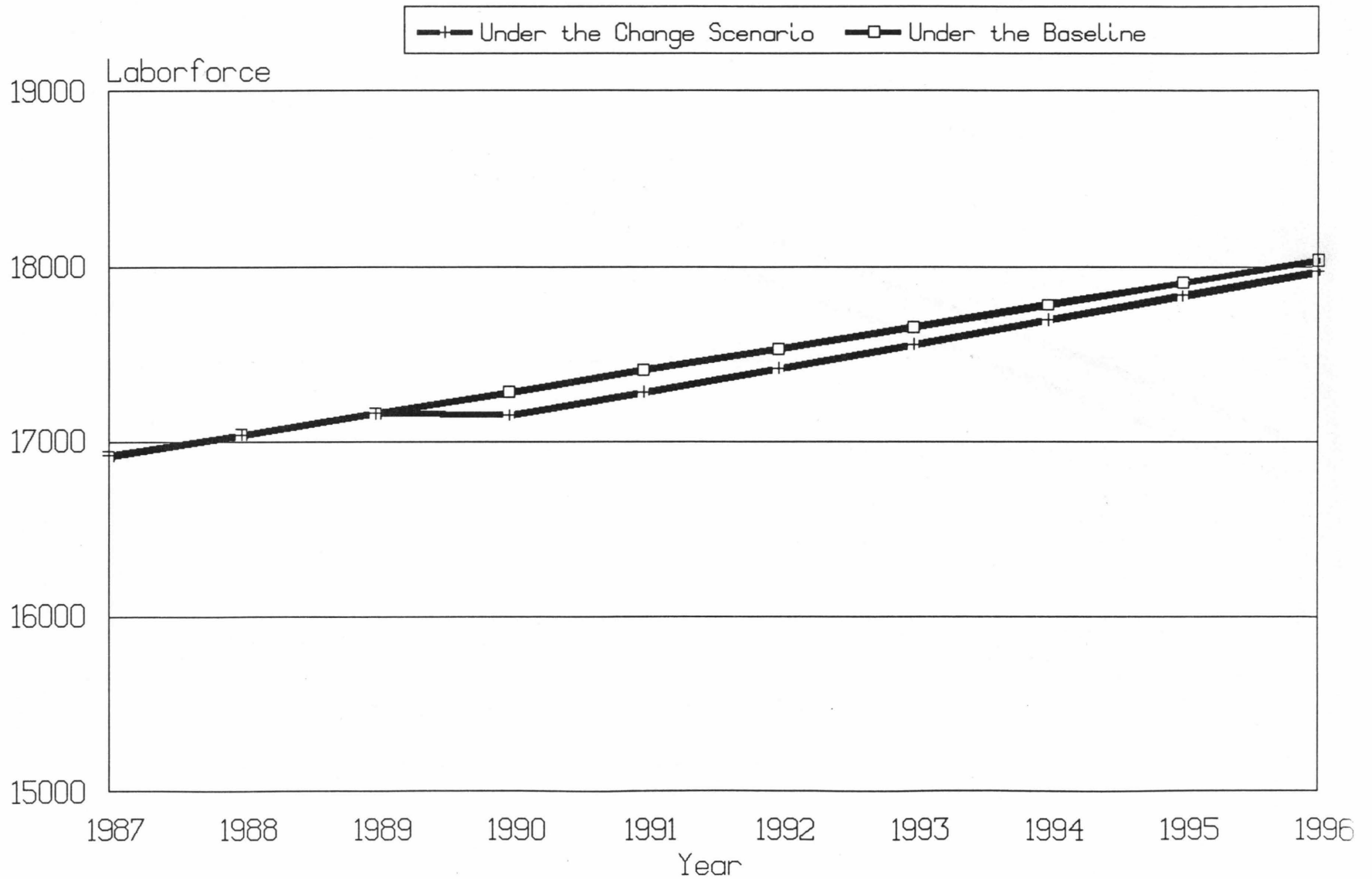
Impact of the AT&T Plant Closing Pulaski County



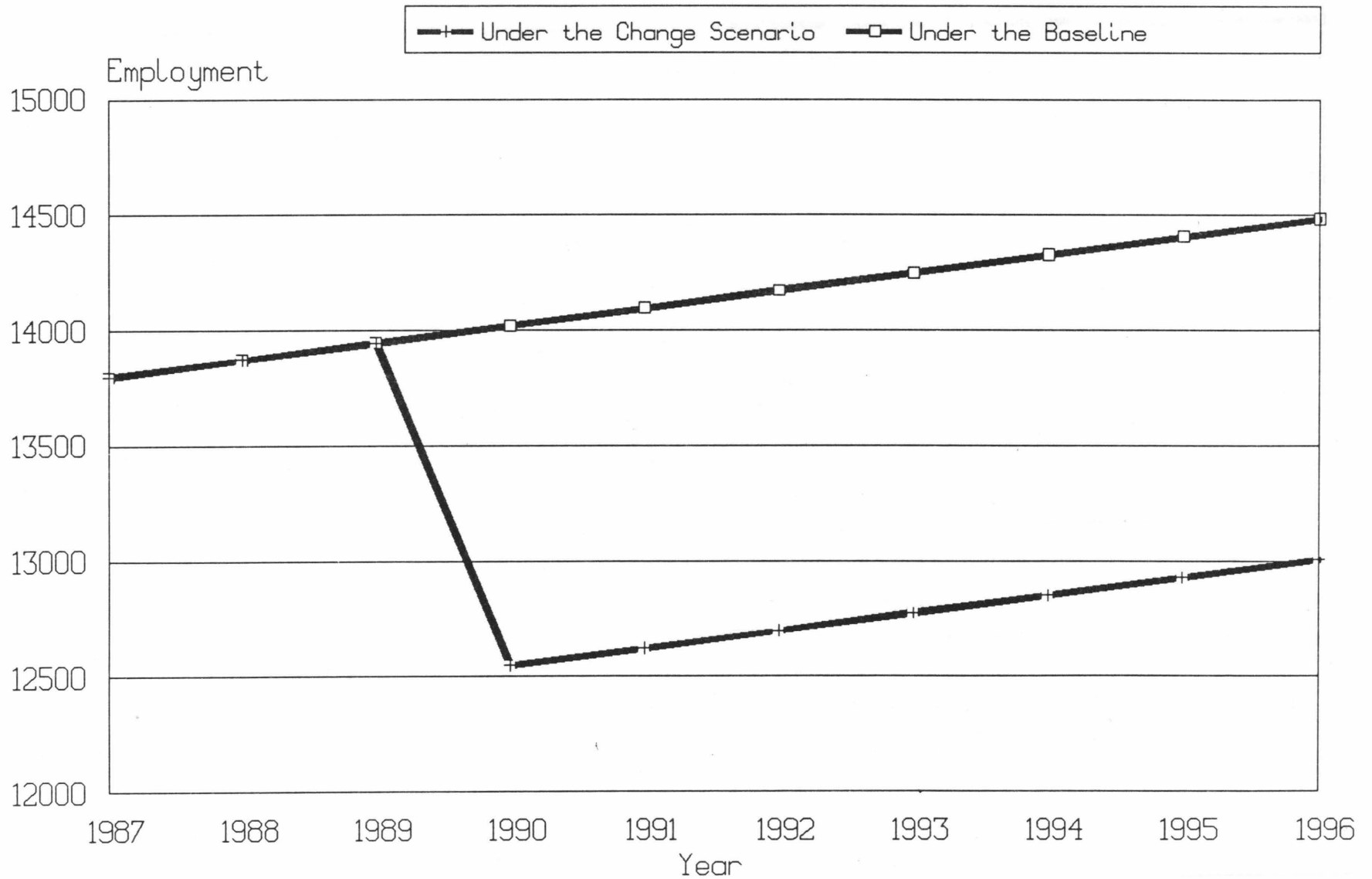
The Impact of the AT&T Plant Closing Montgomery County



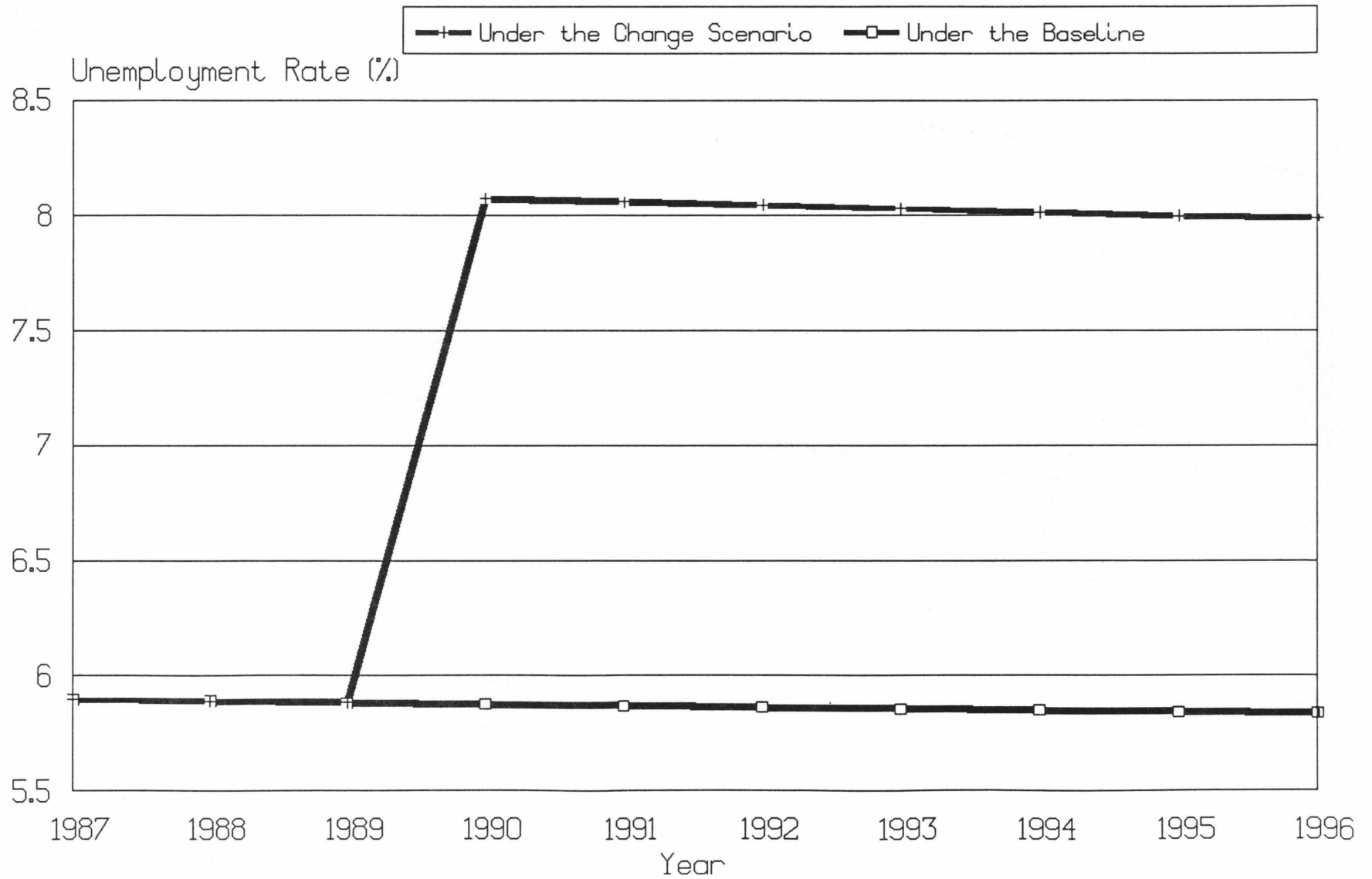
Impact of the AT&T Plant Closing Pulaski County



Impact of the AT&T Plant Closing Pulaski County

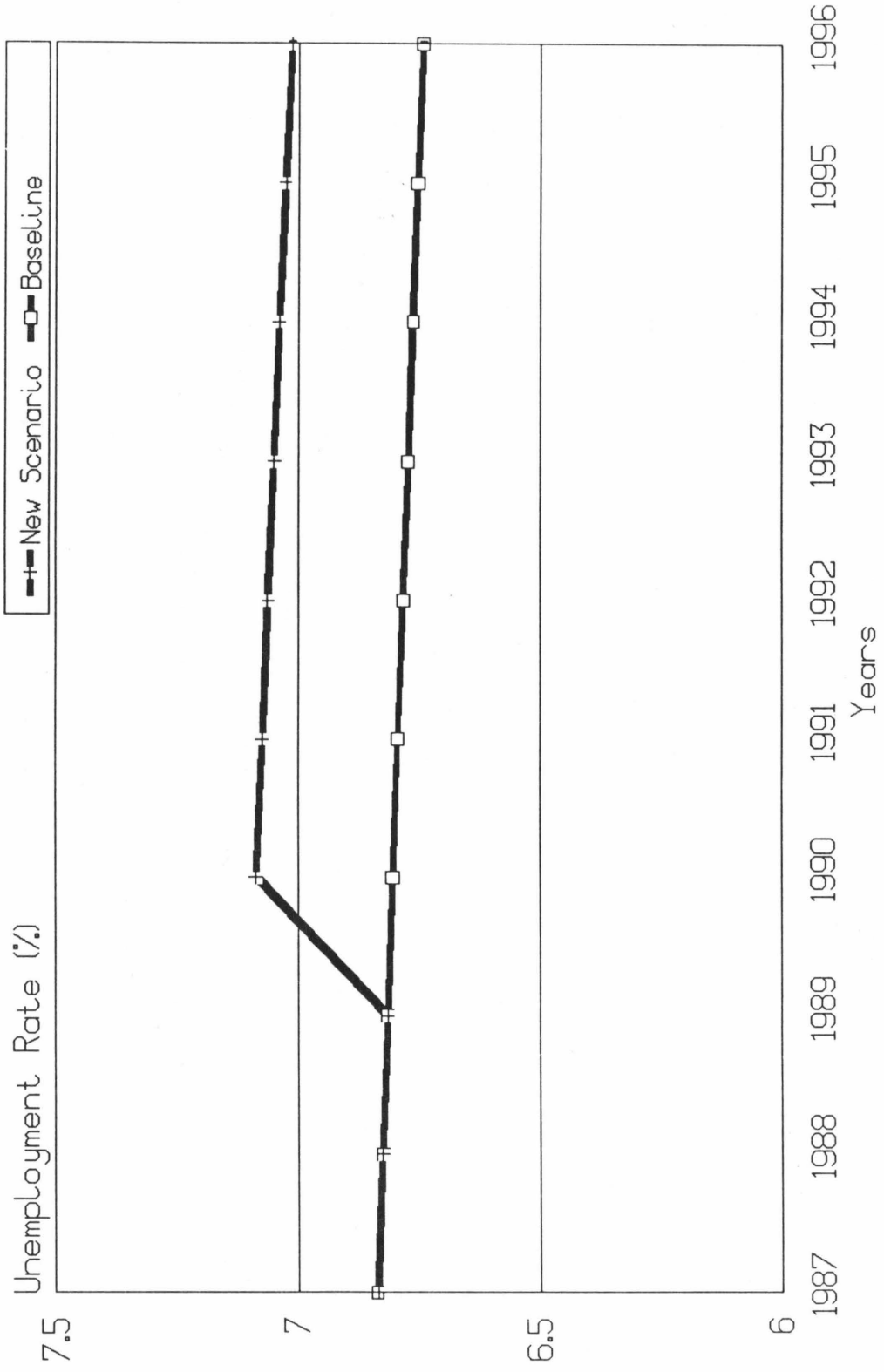


Impact of the AT&T Plant Closing Pulaski County



The Impact of the AT&T Plant Closing

Montgomery County



Impact of the AT&T Plant Closing Pulaski County

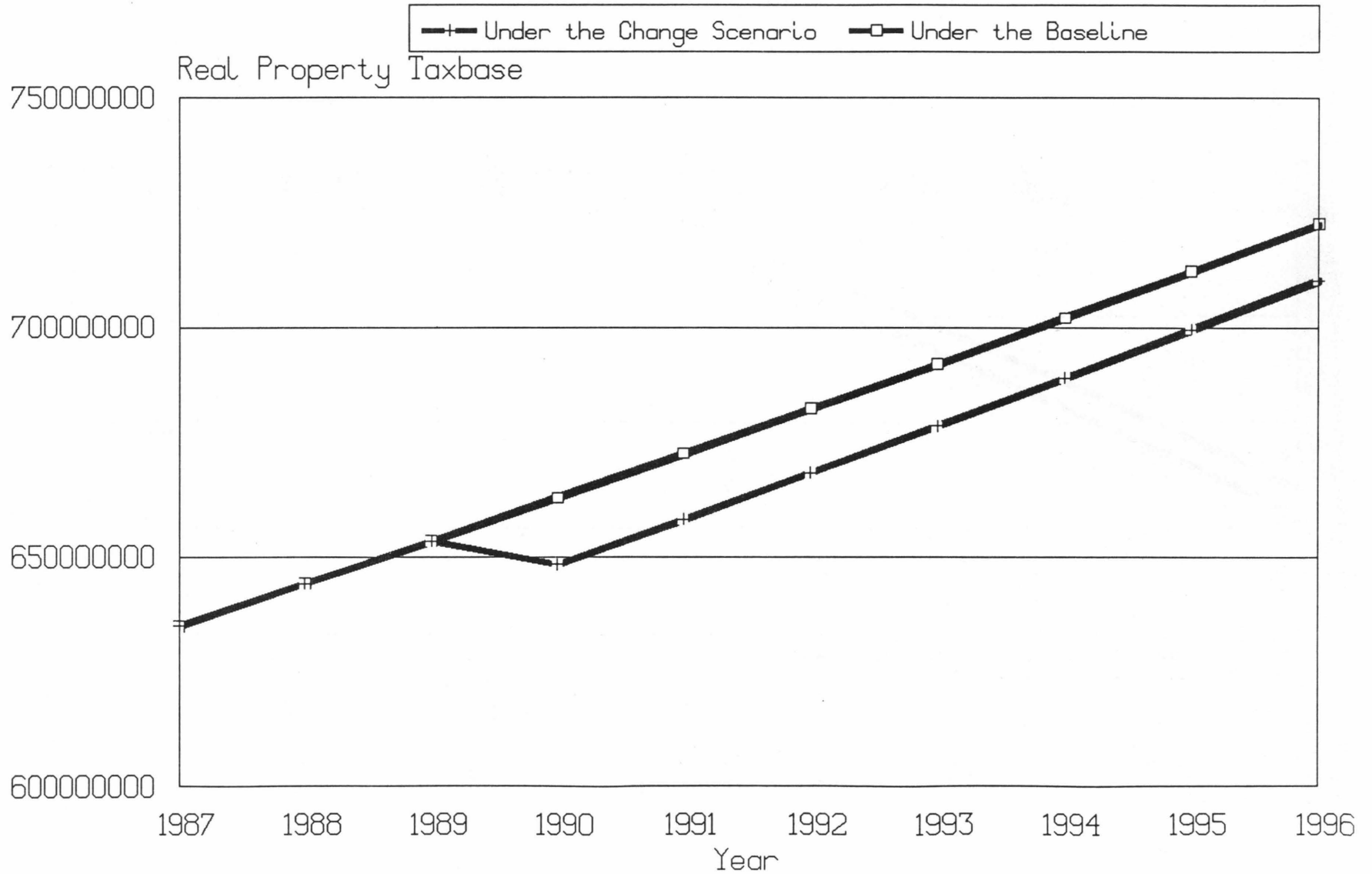


The Impact of the AT&T Plant Closing

Montgomery County



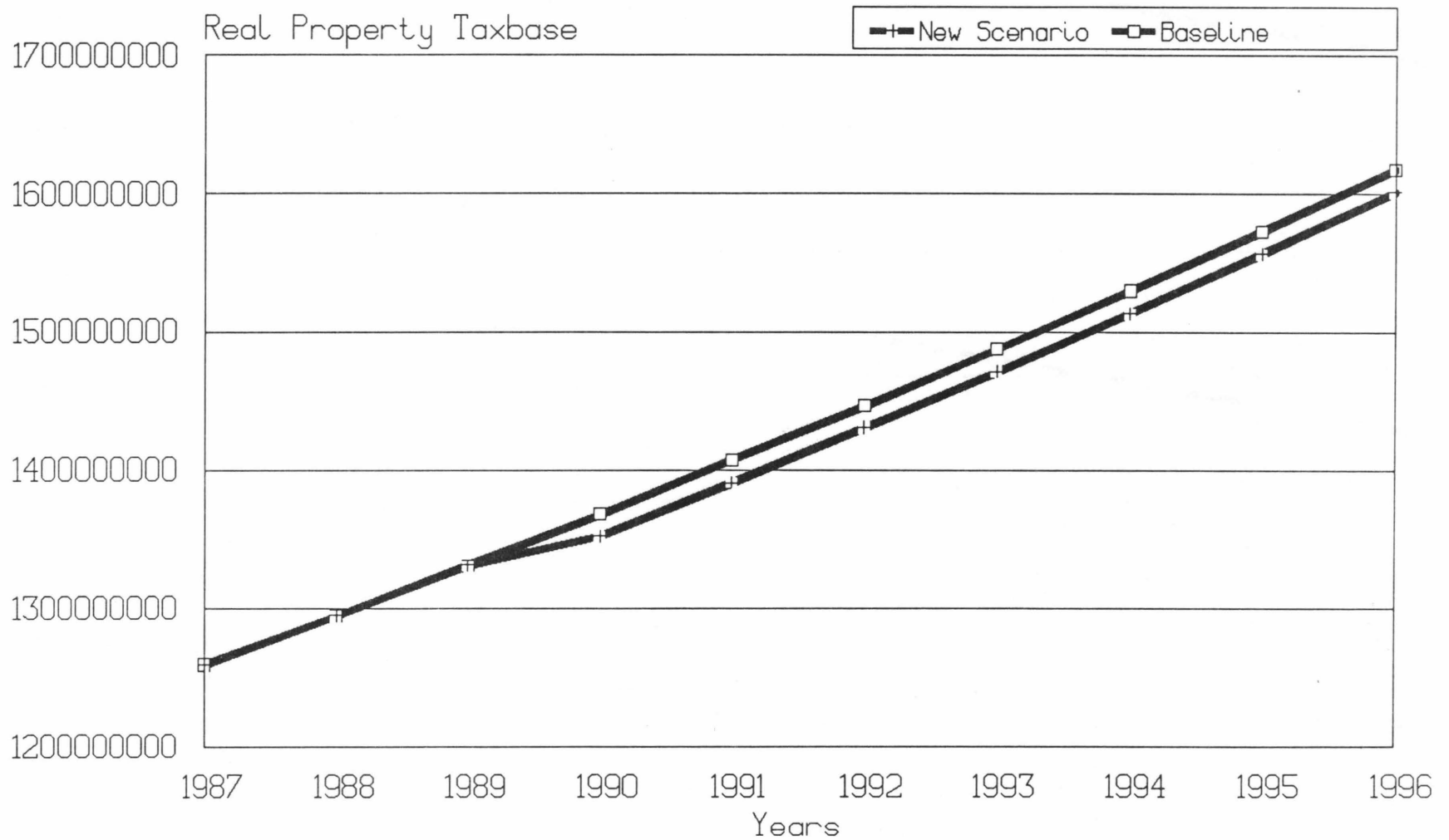
Impact of the AT&T Plant Closing Pulaski County



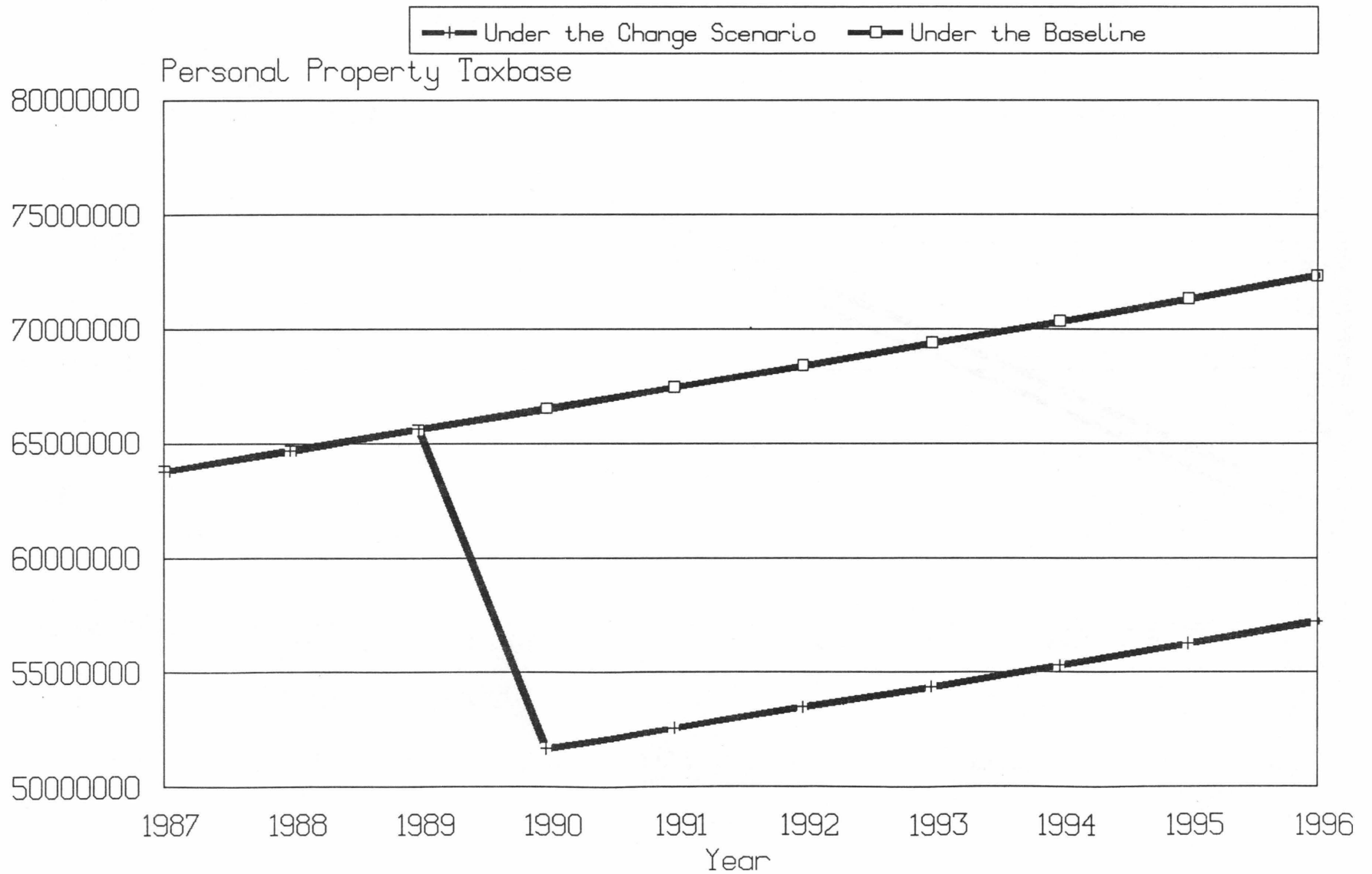
The Impact of the AT&T Plant Closing

Montgomery County

Real Property Taxbase



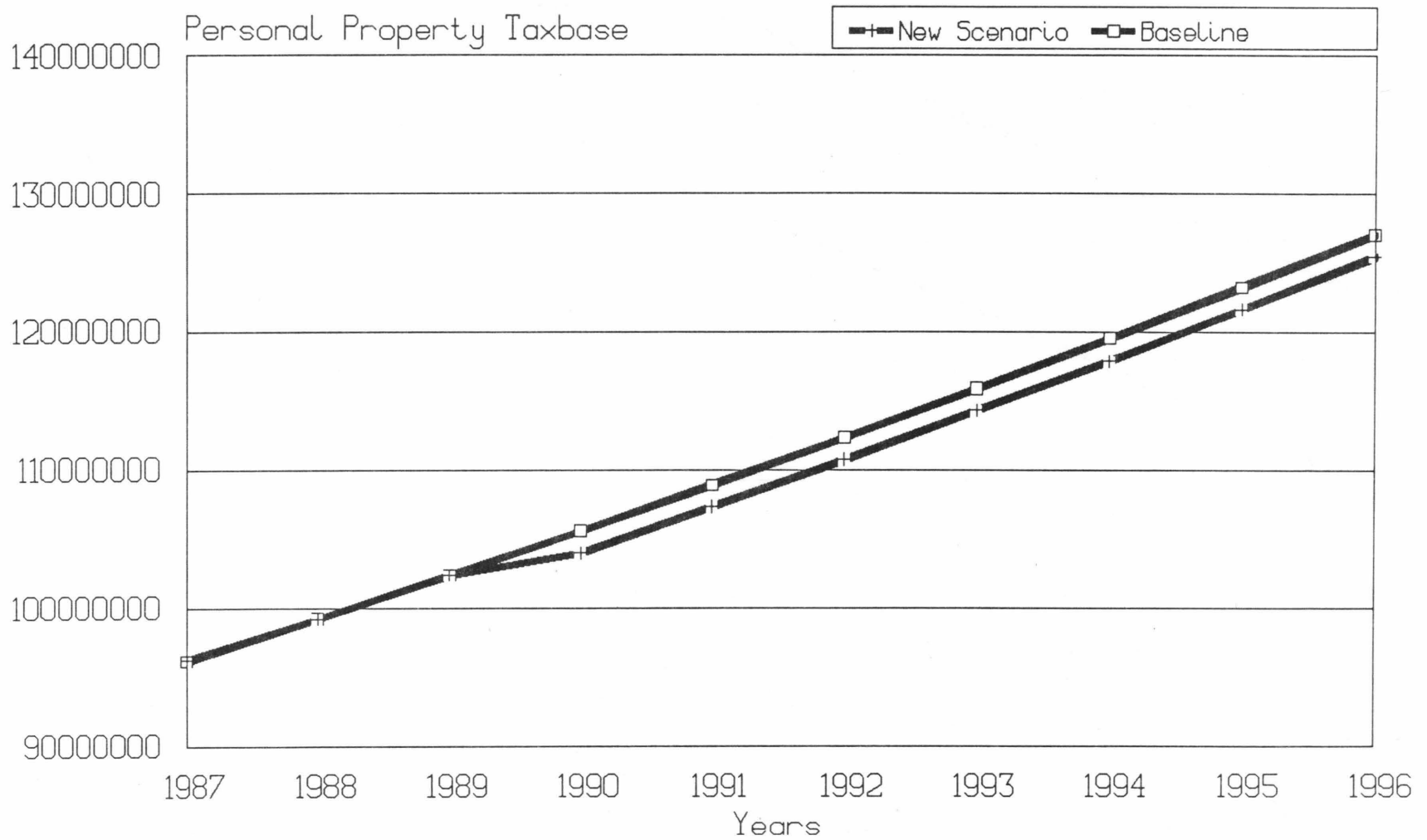
Impact of the AT&T Plant Closing Pulaski County



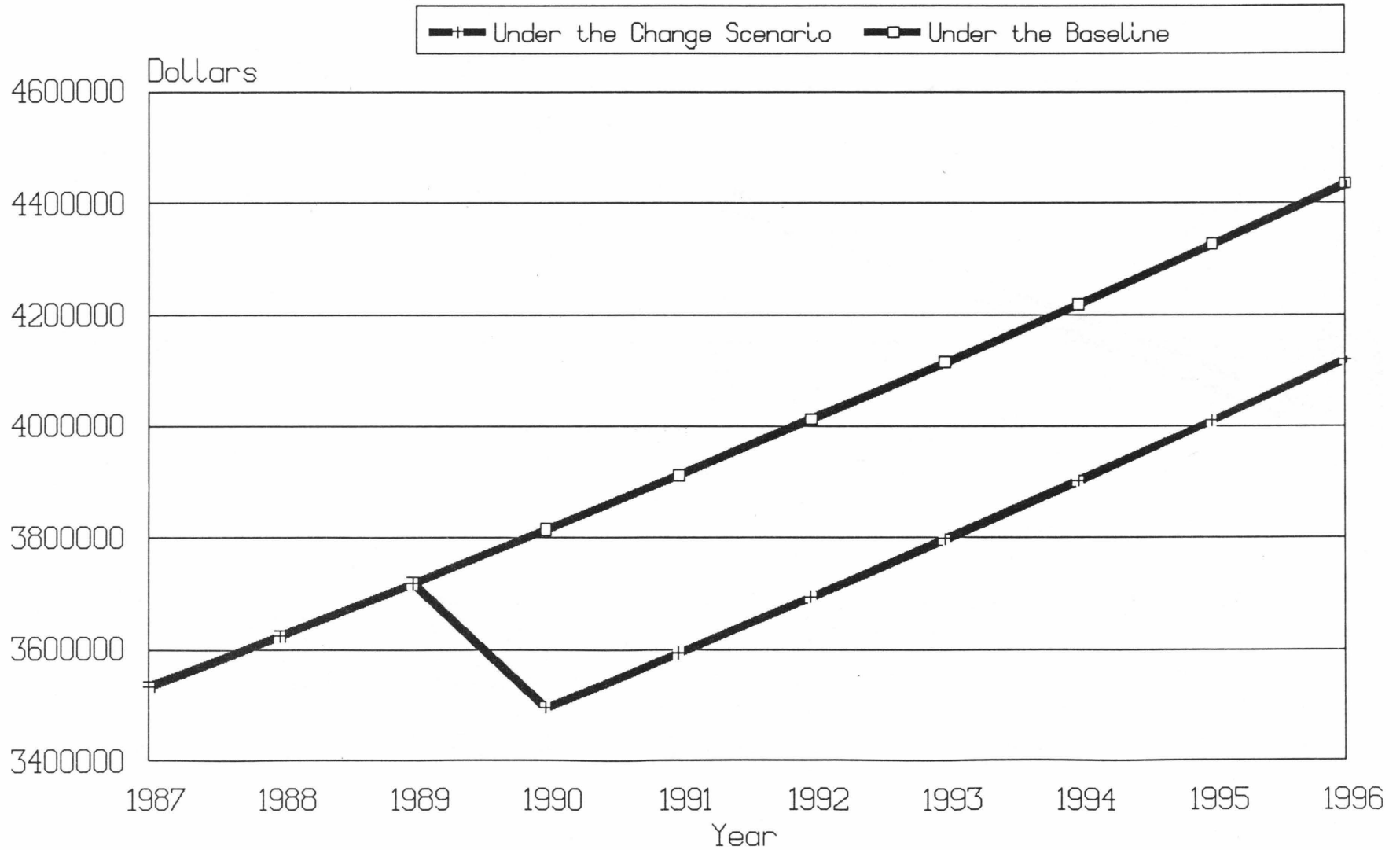
The Impact of the AT&T Plant Closing

Montgomery County

Personal Property Taxbase



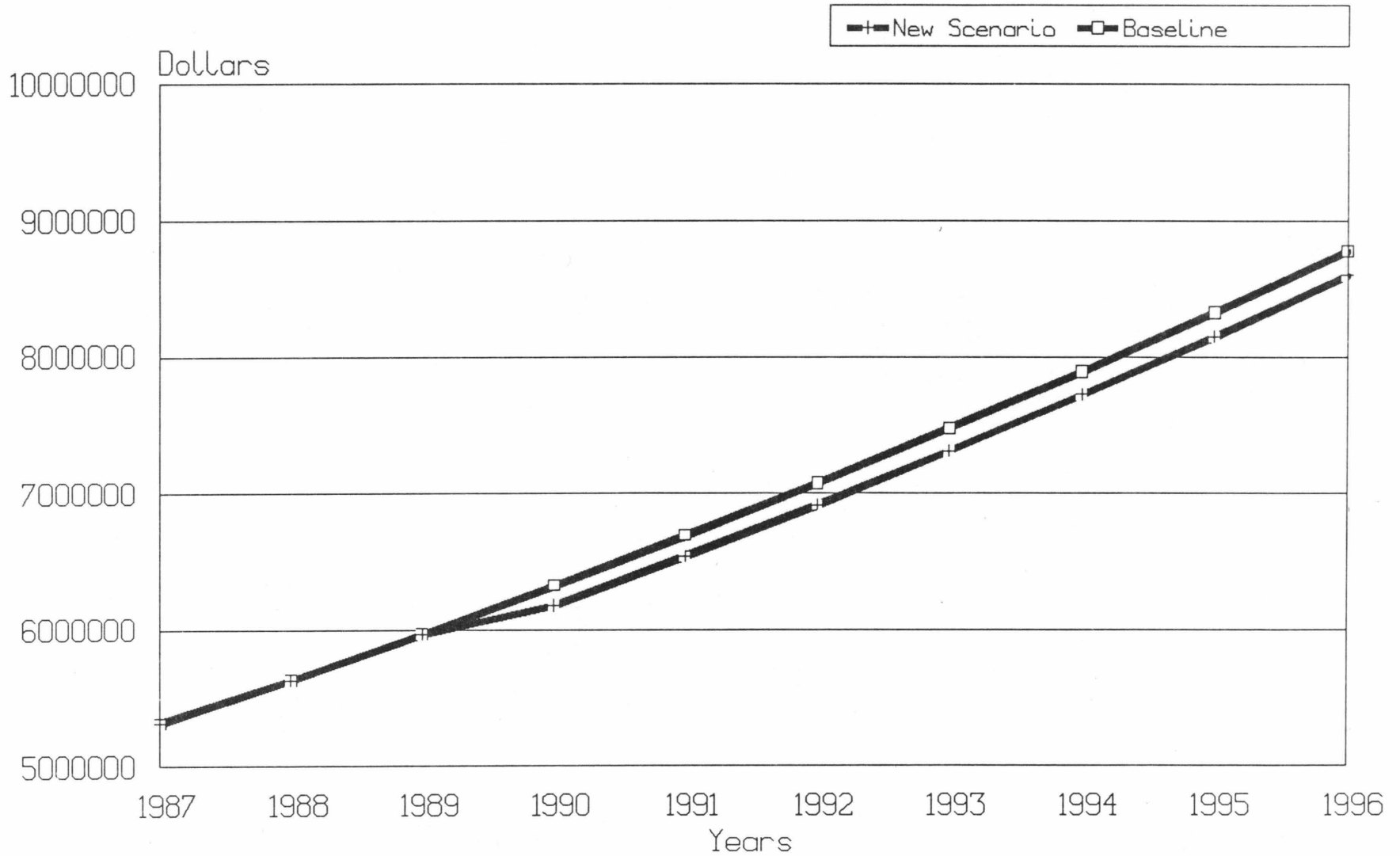
Impact of the AT&T Plant Closing
Pulaski County
Other Tax Revenues



The Impact of the AT&T Plant Closing

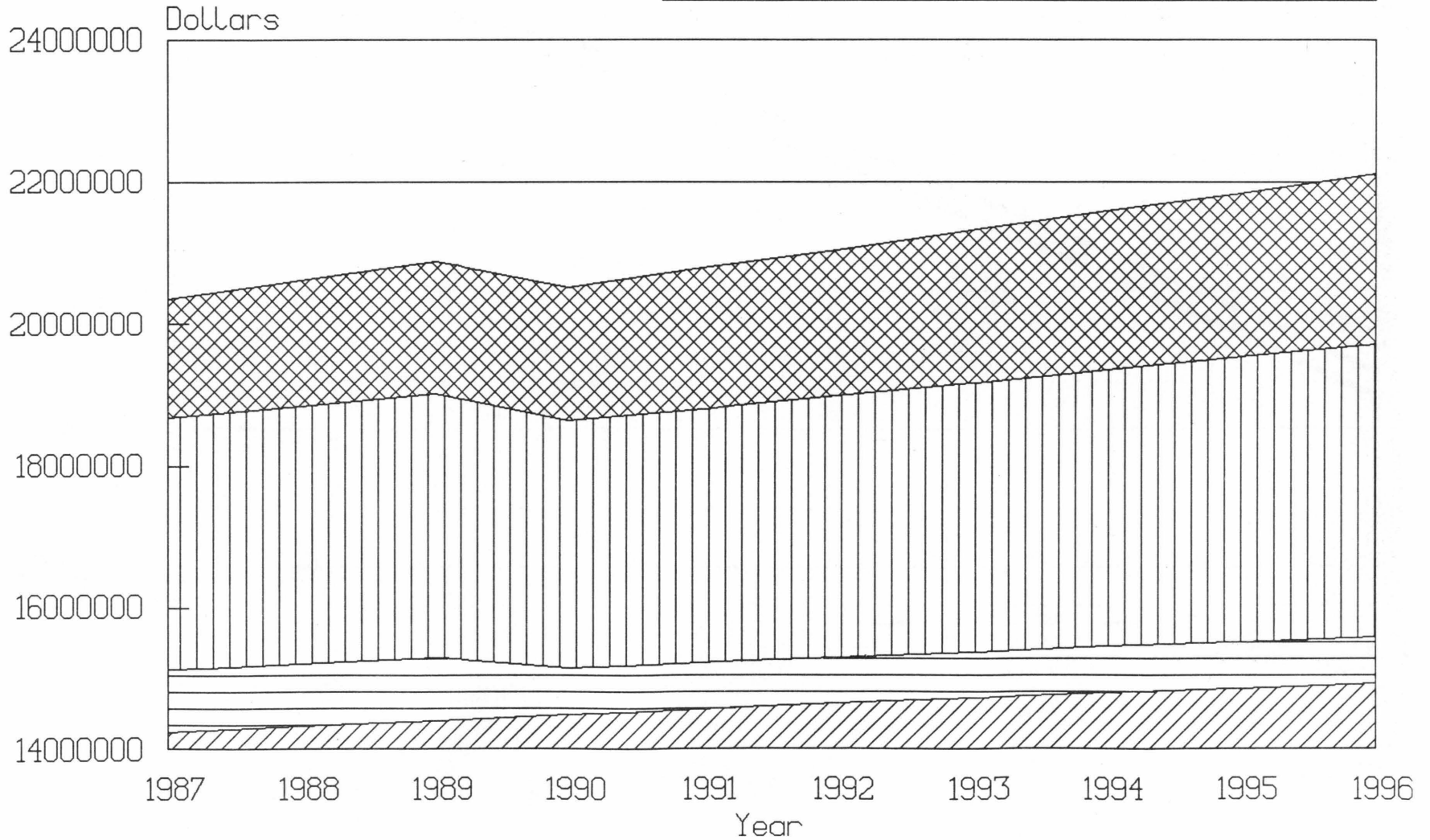
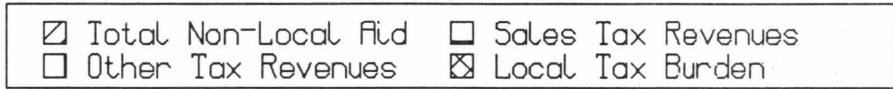
Montgomery County

Other Tax Revenues



Impact of the AT&T Plant Closing Revenues by Source

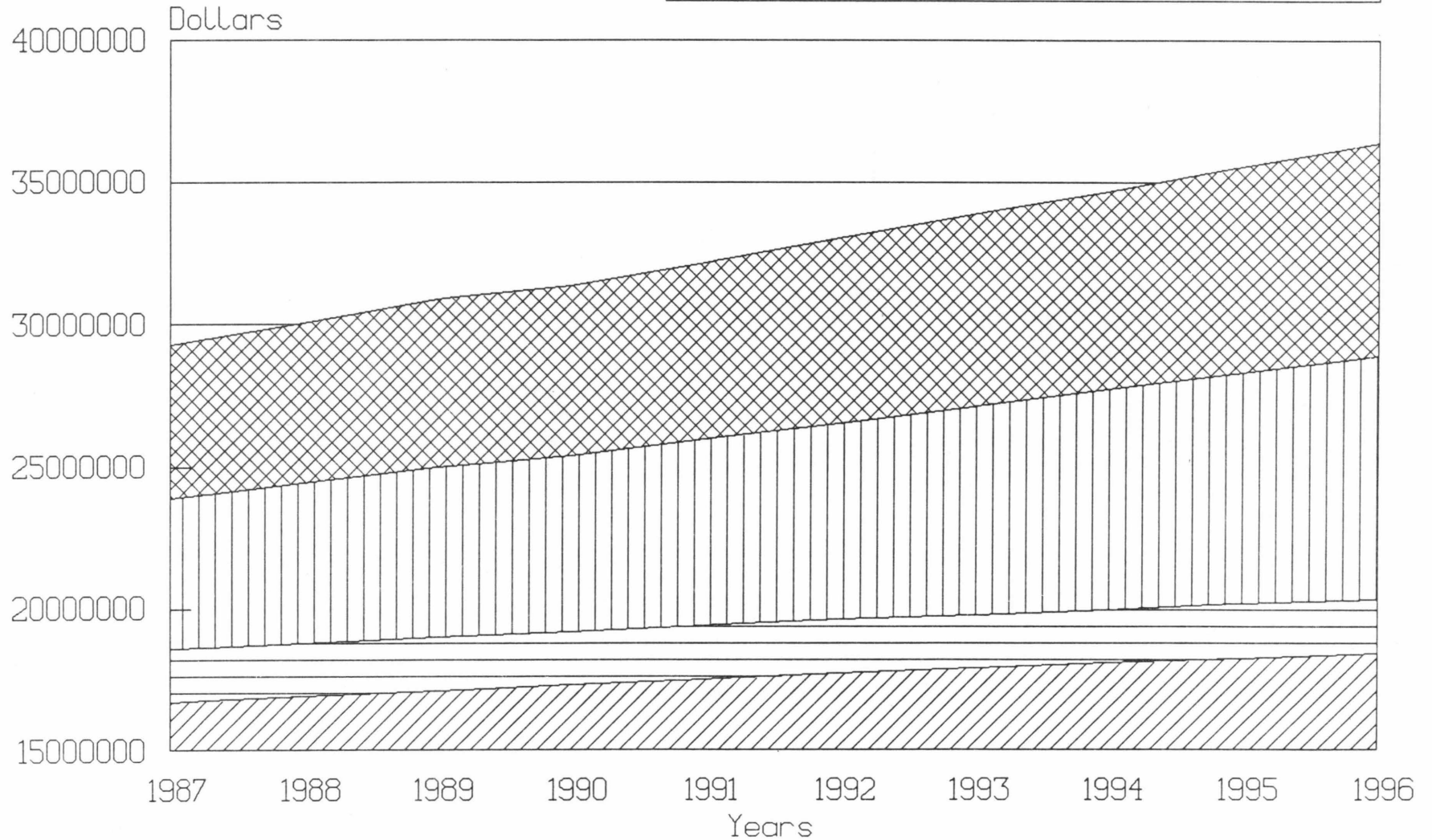
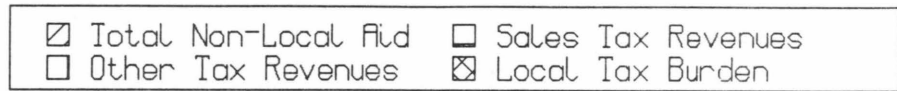
PULASKI COUNTY



The Impact of the AT&T Plant Closing

Revenues by Source

MONTGOMERY COUNTY



Publication 302-004

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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, and September 30, 1977, in cooperation with the U.S. Department of Agriculture. James F. Johnson, Director, Virginia Cooperative Extension, Virginia Polytechnic Institute and State University, Blacksburg, Virginia; Clinton V. Turner, Administrator, 1890 Extension Program, Virginia State University, Petersburg, Virginia.