MACED

210 Center Street
Berea, Kentucky 40403
606-986-2373

COAL AND ECONOMIC DEVELOPMENT IN KENTUCKY

Presentation to the Kentucky Coal County Coalition

by

Dr. Cynthia L. Duncan

June 28, 1985

COAL AND ECONOMIC DEVELOPMENT IN KENTUCKY

INTRODUCTION

As coal county officials, you know better than any one else that the coal industry represents a mixed blessing for the coal fields. On the one hand, coal mining employs large portions of the labor force in your county, and some of the wages earned by those miners is spent in retail stores and saved in local banks in your county. Without coal, many of your counties would still be the "poorest of the poor", with no job prospects for young people. Furthermore, most of you depend upon the severance tax money returned to your county for over a fourth of your county budget.

On the other hand, however, coal has always been a volatile source of income, for both private citizens and the public sector. Since the 1950s, coal employment in Kentucky has gone from a high of 51,400 to a low of 20,500, and back up to 36,000. And, as your road expenditures show, coal production involves high costs for communities. Finally, it is a depletable resource. As public officials in coal counties you need to be looking toward a future beyond coal.

I am here today to talk to you about MACED's research on the coal industry and economic development. Many of the findings and forecasts will be familiar to you. First let me tell you briefly what MACED does, and how we see development. Then I will describe our coal project and present some of our research results to you.

MACED

MACED is a non-profit economic development organization. For the past 9 years we have been working in Central Appalachia, primarily eastern Kentucky, to stimulate economic development. At first, the staff provided technical assistance and loans to small businesses. Over time, we developed what we call a "sectoral" approach -- we research an economic sector that has a sizeable impact in the region, looking for ways it might be changed so that poor people and poor places benefit more.

For example, we have become involved in the lumber industry, assisting small mills and loggers develop better and more profitable operations. The lumber industry employs large numbers of poor rural workers. If more

dependable markets and more profitable markets can be established, large numbers of households will have better economic opportunities. For example, if loggers can sell hardwood lumber for veneer rather than for pallets, they can make much more profit. If they can plan on a steady reliable market for their logs, they can invest in better equipment and develop more efficient operations. MACED is trying to expand the benefits from the lumber industry to more low income people.

In banking, as many of you who are county judges know, we have been working with a consortium of eastern Kentucky bankers to expand the amount of mortgage funds available in the region, especially for low and moderate income households. MACED staff has offered practical workshops to assist bankers in using the secondary market, has worked with the counties and banks in issuing mortgage revenue bonds to increase the amount of funds available to low income borrowers, and has advocated, successfully, some changes in federal regulations that make programs more appropriate for eastern Kentucky conditions. Again, we see our work with bankers as an effort to change the way an important institution operates, expanding its capacity to benefit the region and low income people.

MACED AND THE COAL INDUSTRY

Obviously, a sectoral approach to development in eastern Kentucky must consider the coal industry. Therefore, two years ago we began to research the coal industry and its economic and social impact. We want to see whether there is some way that the coal industry can return more benefit to coal field areas without jeopardizing the viability of the industry. We are combining analysis of the industry with an assessment of current policies toward the industry. Our goal is to promote public discussion about how coal can be more developmental, and to work with interested Kentuckians in generating new ideas about local and state programs to improve conditions.

Many assume that volatility in demand for coal is the problem, and that if there were enough growth in the industry, the coal field counties would improve without changing the current patterns of private and public management of the industry. If Kentuckians see the coal field problem as a coal demand problem, then policies which combine promotion of coal with

a laissez-faire social policy toward the region are adequate. If the problem is not one of demand for coal, other measures are necessary.

MACED's coal project is pursuing four main threads right now: We analyzed the impact of growth in coal in the 1970s, comparing changes in coal counties with changes in noncoal counties. We gathered social and economic data for all of the nonmetropolitan Kentucky counties for 1960 and 1980, to examine the relationship between economic growth and development. I'm going to share some of those findings with you today.

Also, we have been talking with coal industry leaders. Thus far we have talked with seventeen CEOs of large coal companies, to get their perspective on development problems. [1] Our purpose in having these discussions is two-fold. On the one hand, we want to learn first-hand how these coal leaders perceive their industry and its future, as well as how they perceive development problems and responsibility for development. Secondly, we find these interviews give us insights into what changes, in either the private sector or public policy, might be possible. We get ideas about how MACED or government officials might work with companies to alleviate some problems in the region. We plan to talk with more operators of smaller companies, as well as bankers, and other local leadership like yourselves over the next few months.

We are analyzing production, productivity and employment between 1975 and the present, and making some projections into the future about employment trends in the coal industry and in Kentucky in particular. I'm

---

[1] In lengthy, taped interviews, we discuss (a) the future of the Appalachian/eastern coal industry, including trends in production, productivity, labor requirements, technology and labor relations; (b) acid rain legislation, and the likely impacts of different bills on production, employment, and community welfare; (c) ways of making coal a better foundation for economic development in coal-producing areas; (d) ways of bringing stability and predictability to coal demand; (e) company policy toward changes in the industry, especially methods of easing the transition for unemployed miners who will not be rehired; and, finally, (f) public policy and the industry, including demand side regulation, capital formation and investment, the role of the public sector in industry affairs, and likely future trends.

going to tell you a little about those findings as well, and where we think they are leading.

Finally, we are assessing the public and private benefits and costs of the coal industry in Kentucky. Using a balance sheet format, we will project the relationship between the public sector and the coal industry between 1985 and the year 2000, given current policies.

In the early fall we will publish five reports exploring these coal and development issues. I'm giving you a preview this morning.

WHAT DO WE MEAN BY DEVELOPMENT?

Generally, people think of economic development as expanding a local or regional economy so that people have employment and income opportunities. Therefore, we often equate development with creating jobs which, in turn, becomes industrial boosterism and promotion of an "improved business climate". However, development is more than plant attraction. It is a process of building a stable and resilient local economy which provides a good quality of life.

People consider a place "developed" when men and women can find stable employment, good housing, good health care, and send their children to good schools. The quality of the physical environment has emerged as a prime criterion for the quality of life -- people want to live and raise families in healthy environments, and corporations want to locate plants in areas which offer their employees these benefits.

HOW DOES DEVELOPMENT HAPPEN?

Economic activity expands, and the benefits, wages and profits, are reinvested, publicly and privately in the place that needs development. Public reinvestment entails taxation and investment of tax revenues in local infrastructure such as roads and water and sewer systems, as well as schools, clinics, libraries, and so forth. Private reinvestment includes savings in local banks, loans to new businesses, as well as local expenditures and construction -- what the economists call "multipliers".

An important factor in stimulating this private sector reinvestment process is widespread distribution, both of income and employment. When

income is concentrated in the hands of a few people, it is less likely to to percolate down through the local economy and improve conditions over all.

Public sector reinvestment depends upon adequate taxation. Of course, international competition puts a limit on how much taxation and other costs any one industry or corporation can absorb and still produce its products at a profit. That is what makes coal a "mixed blessing" for your counties. And it is what leads us back to policies which promote coal. If we can't add on to the costs the coal industry absorbs and make it share more of the benefits without damaging its competitiveness, then we end up working to expand the markets for coal so that the pie will be bigger and coal counties can have a larger piece.

That's a long introduction to our research. Most of the research I am going to share with you this morning looked at the effectiveness of those promotional policies. When coal grew in the 1970s, did the coal field counties improve? Does development follow growth?

CHANGES IN RURAL KENTUCKY, 1960-1980

Economic and social changes occurred throughout rural Kentucky between 1960 and 1980. There were changes all over rural America during this period, both in what sector made up the economic base of rural counties, and in social conditions.

Changes in the economic base

Generally rural America shifted away from dependence upon agriculture, and became more dependent upon manufacturing. Many refer to the movement of manufacturing into rural areas as "rural industrialization". In 1960 18% of rural Kentucky earned income came from agriculture, 11% from mining, and 13% from manufacturing; in 1980 agriculture made up only 6%, mining had increased to 17%, and manufacturing had increased to 18%. Interestingly, in rural Kentucky, government's portion stayed the same, at 18%.

Changes in social conditions

Rural Kentucky "caught up", somewhat, with the rest of America, and differences in conditions also narrowed among counties. In 1960 per capita personal income in rural Kentucky was 51 percent of the national

average, but by 1980 it had risen to 64 percent. These increases are reflected in a general decrease in the poverty rate: low income families (families with incomes less than $7500 in 1980; less than $3000 in 1960) made up about 54 percent of all families in rural Kentucky in 1960 -- 2 and 1/2 times the proportion in the nation; by 1980 27 percent of families in rural Kentucky were low income, compared to 14 percent nationwide.

In housing conditions, we moved from 33 percent plumbed housing units to 86 percent. Education, you won't be surprised to hear, is more problematic: Kentucky has not closed the gap with the rest of the nation -- we lag behind as much as we did in the 1960s, despite improvements in the rural counties. In 1960 only 20 percent of rural Kentucky adults had a high school education, (less than half the national figure at the time), but in 1980 43 percent had completed high school (close to two-thirds the national figure of 67 percent).

Changes in Coal Counties compared to other counties

In order to look more closely at coal county development and change, I divided rural Kentucky counties into four groups, according to the main economic base in each. The groups include agriculture, coal mining, manufacturing, and a "residual" category of counties in which government makes up the primary economic base (like Franklin or Lyon counties), or which have no dominant base (like Estill). This categorization gave me 27 rural coal counties, 6 in western Kentucky and 21 in eastern Kentucky.

ECONOMIC GROWTH

Coal counties had a much larger growth in income than non-coal counties, no matter how you measure income. Coal counties growth in earned income (net labor and proprietor income by place of residence, non-transfer payment income) between 1960 and 1980 was 164 percent, compared to 111 percent over all in rural Kentucky counties, 91 percent in farm counties, 93 percent in manufacturing counties, and 88 percent in counties that have a mixed economy or depend heavily on income from government work.

This greater percentage growth in coal counties would suggest greater opportunity for economic development. Poverty levels should go down. There should be more money for "public and private reinvestment" in the

local economies. We would expect to see evidence of greater social gains. However, conditions in coal counties improved at virtually the same level as conditions in the other types of counties, even though they experienced substantially less economic growth.

DEVELOPMENT INDICES, 1960 AND 1980

I constructed a summary measure of development, which includes a poverty indicator, an education indicator, and a housing indicator. I add these up for each county, and thus have a development score— the maximum possible is 300%. Presumably a "fully developed" county would have 100% of its families with incomes over the poverty level of $7500, 100% of its adults would have a highschool education, and 100% of its housing units would be plumbed. To give you an idea of what conditions are like elsewhere, I have figured these indices for the rest of the nation and for West Virginia. As you can see, the U.S. as a whole has a score of 251%; the rural U.S. scores 235; West Virginia scores 226, and Kentucky scores 225. Rural Kentucky scores 202.

When we look at these scores by base in rural Kentucky, we see that farm and coal counties lag behind the others. Farm counties have a cumulative index of 188 in 1980, and coal an index of 191. Manufacturing is a little higher, at 212, and government-mix counties the highest, at 218. Of course, our real interest here is in the change that occurred between 1960 and 1980, because, although we don't expect miracles from economic growth, we do expect more change when growth is higher. After all, that's what our policy's hope is pinned on.

As you can see, the change is virtually the same across all the bases. Even though coal growth was 164 percent, compared to around 90 percent in the other economic bases, the improvement in conditions in coal counties was just about the same as it was in all the other bases.[2] Let's look more specifically at the differences between bases.

---

2 There were some unusually big changes, but they don't follow the sectoral differences. If there's time later, I have some maps I can show you which pinpoint the counties that really improved a lot.

LOW INCOME FAMILIES

In 1960, 61 percent of families in coal counties had incomes less than $3000, compared to 60 percent in farm counties, 50 percent in manufacturing counties, and 46 percent in the government-mixed group. By 1980, coal counties had 30 percent low income families (less than $7500, which is equivalent to the $3000 in 1960). But farm counties also had 30 percent, while manufacturing counties had 24 percent and government-mixed counties 23 percent. In other words, both farm and coal counties improved about "30 percentage points", while both manufacturing and government-mix counties improved about 25 percentage points. Total income grew at a much greater rate in coal counties, but this growth did not translate into greater reductions in poverty levels. Apparently, the income growth was concentrated at the top.

HOUSING CONDITIONS

The same pattern is evident in changes in housing conditions. Only 28 percent of housing units in coal counties had plumbing in 1960, compared to 26 percent in farm counties, 39 percent in manufacturing counties and 40 percent in the government-mixed group. There were substantial changes between 1960 and 1980 in rural Kentucky! In 1980 83 percent of coal county houses had plumbing, 80 percent of farm county units, 89 percent of manufacturing county houses and 91 percent of our mixed industrial counties. Once again, however, changes were paced the same across county groups -- coal and farm both gained about 55 percentage points, and manufacturing and the mixed group each gained about 50 points.

EDUCATION

We see the pattern repeated when we look at education gains across rural Kentucky. Coal and farm counties started out lower and ended up lower, but they narrowed the gap a little between themselves and the manufacturing and government-mixed counties. Coal counties did not stand out, however.

In 1960 only 16 percent of the adults in coal counties had a high school education. Seventeen percent of adults in farm counties were high school graduates, and 23 and 24 percent in the other two groups. By 1980

both farm and coal counties had 38 percent high school graduates, compared to 47 and 50 in the other two groups. Gains in education were more equal across all the bases, and in this respect farm and coal counties did not narrow the gap very much. As you can see, farm counties achieved a 21 point gain, coal 22, manufacturing 24 and the government-mix counties 26 points.

WHAT DO THESE COMPARISONS SHOW?

I looked at a number of other indicators for evidence that coal counties were improving faster than other counties, but there was none. (Coal and farm counties lag on sewer and water systems too, even though coal counties are more densely populated than manufacturing). You might be able to say that the growth prevented coal counties from sliding further back, but since the farm counties improved without growth, you can't say even that with certainty. There are two trends here.

* Conditions in all of rural Kentucky improved, and in some cases counties with the poorest conditions in 1960 "caught up" with other counties by 1980 (education excepted).

* Overall, however, conditions in 1960 were the best predictor of conditions in 1980, the greater economic growth in coal counties notwithstanding.

It appears that public and private reinvestment of the greater economic growth in coal counties failed to occur. Why?

For one thing, income and work are distributed much more unequally in coal counties. Coal counties have the highest earnings per job and the highest average pay, but the lowest per capita tax revenues and savings deposits. They have the same proportion of working age and elderly people as the other county groups (despite the myth that they have more dependency), but they have a greater proportion of families with no worker. Almost one fourth of the families in coal counties reported no worker in the family!

Finally, and importantly for coal counties' future, coal counties have an alarmingly greater proportion of teenagers who are not in school, the army, working or looking for work. Fully 36% of the 16-19 year olds in coal counties have nothing to do, and that does not include teens who are looking for work or in school.

In sum, coal counties have "skewed" economies, a kind of dual economy, with some miners and coal operators earning good money, and a lot of families and households that are at the bottom of the ladder. When this dual economic structure combines with the mountainous topography and dependence upon a single industry that we have in eastern Kentucky, there is not much potential for income growth to stimulate development.

Of course, coal is volatile, and even since 1980, as you know, thousands of miners have been laid off in the Kentucky coal fields. In fact, even when the UMW and BCOA negotiated a new contract without a strike, miners and communities in the coal fields "absorbed" all the negative effects of that agreement. Utilities had overstocked in anticipation of the strike, and so demand for coal declined dramatically. Coal companies laid off workers, and coal communities dependent upon coal employment faced another hard winter. Miners and their communities bore the cost of that volatility.

This recent episode in coal volatility (and the fact that coal miners and communities absorb its impact) suggests why coal income does not get reinvested in the community. The money represented by greater economic growth in coal counties is not being invested by wage earners or local entrepreneurs, as far as we can tell, because these gains end up being transient. Miners and operators may "consume" rather than "invest" their income gains because they don't really see a future for their communities.

Of course, I don't need to tell this group that the public sector, for its part, isn't doing much better. The severance tax on coal production, as you know, provides some 8 percent of the state's revenue. But the state doesn't "invest" this money either -- it used it to replace food sales tax revenues in 1972, and ever since has poured the bulk of it into the general fund, "consuming" the revenue from a non-renewable resource. I think that the severance tax has enabled state to avoid raising property taxes and individual income taxes. This translates into coal field subsidy of the rest of the state.

Half of the severance tax funds over $177 million go back to coal producing and coal impacted counties, and most of the money is used for roads. As you know, there is a formula which requires a certain portion to be used for roads, but often your coal counties use an even greater proportion than required on roads.

For example, in Martin County in 1982 severance tax revenue of $1.2 million made up 54% of all county revenue, and 82% of that money was spent on roads and 16% on administration. (Overall, 61% of total expenditures were on roads.) When coal counties did not receive expected severance tax revenues in recent years because production was down, basic county budget items went unfunded. Neither the state nor the counties reinvest the revenue from coal production. And both entities face uncertain revenue sources from coal — coal is just as volatile for the public sector as it is for the private sector.

FUTURE TRENDS IN COAL PRODUCTION, PRODUCTIVITY AND EMPLOYMENT

The Energy Information Administration of the Department of Energy has made forecasts of future coal production for the nation and for Kentucky. DOE forecasts are a fairly common standard, but the numbers they released were considered high, even by the National Coal Association, which projects fewer tons ten years from now. Therefore, DOE revised its projections recently. We are revising our own numbers, and using Mine Health and Safety Administration figures for employment since they will be more accurate.

To give you an idea of trends in production and employment in coal, however, I am going to show you our earlier forecasts. While these will be revised for our reports in the fall, the older numbers still reflect the overall trends accurately.

We took 90 percent of the DOE forecasts as a reasonable figure. (These figures are lower than the KY Dept of Mines and Minerals because the latter counts everyone who worked in the industry, as if they worked steadily. This difference adds about 25% to employment. Thus you hear that we have 45,000 miners, but actually DOE says in 1983 Kentucky had about 36,433 miners, and MSHA says we had about 32,284).

Our 90% of DOE projects that coal production in Kentucky will rise from 128,694,000 tons in 1983 to about 178,074,000 tons in 1995. If there were no continued increases in productivity, that would mean a net increase in Kentucky coal employment of about 20,000 in 1995.

However, the industry is increasing productivity, and doing so at a steady pace. If you look at this graph of Kentucky productivity between

1975 and 1983, you can see that miners produced more tons of coal over the last few years. In 1980 Kentucky coal miners produced 1.75 tons per hour. In 1981 each miner produced 1.84 tons per hour, and by 1983 each miner was producing an average of 2.09 tons per hour.

The coal executives with whom we have talked all agree about increased productivity in the past few years. The boom of the late 1970s meant a scramble, and added new producers as well as new, less efficient workers and managers in big operations. These inefficiencies are being "shaken out" now. The coal industry leaders with whom we have spoken confirm that productivity will continue to increase, and their annual reports all predict future profitibility in coal divisions on the basis of increased productivity. Increased productivity, of course, translates into declining employment.

Between 1980 and 1983, Kentucky coal employment declined by 9,962 people. Of course this decline represented a decline in production as well as an increase in productivity, but productivity is likely to increase still further. Annual Kentucky coal production is predicted to increase by about 49 million tons between 1983 and 1995. If there were an annual increase in productivity of 4%, which is a reasonable figure according to industry leaders and analysts, Kentucky would experience a net loss of 4,735 jobs, even though we produce more coal.

Production increases and productivity increases will, of course, vary by region, seam, type of mining and type of coal. East Kentucky production is likely to rise more than other areas, especially deep mines. There will be less surface mining because the easily stripped coal is being mined out, and the regulations are making it less profitable for small operations to strip mine. Western Kentucky, as you realize, is particularly vulnerable to the effects of acid rain legislation since the coal is higher sulfur. What we see in western Kentucky is fewer, larger mines that are holding their production steady through long term contracts, but not experiencing much growth. The uncertainty represented by the potential for new environmental legislation makes it hard for western Kentucky coal companies to crack new markets.

These figures are currently being revised by MACED staff and consultants. We have contracted with Energy Ventures Analysis, a highly sophisticated

energy consulting firm in Washington, to conduct an extensive analysis of productivity in Central Appalachian and Kentucky coal. EVA will be providing us with subregion projections, including seam-by-seam analyses of production and productivity over the next 15 years, as well as a survey of 100 large mines.

WHAT DOES THIS MEAN FOR THE FUTURE OF KENTUCKY COAL COUNTIES?

First, citizens and public officials throughout Kentucky need to recognize that growth in coal, under current policies, does not bring greater improvement in the standard of living in coal counties. Just recognizing that fact is a big step.

Secondly, we need to realize that coal employment is unlikely to grow. The people who lost jobs between 1980 and 1983 are unlikely to find employment in the coal industry again. My understanding is that people have already begun to leave the coal regions again, looking for work and a future for their families in Florida, Texas, and elsewhere. I fear that the coal counties of Kentucky are on the verge of serious emigration again, and that you will lose valuable people on whom your future depends. (I hope to put together a survey of coal counties this fall to see the extent of unemployment, emigration, and what people are planning to do.)

Clearly, all of this suggests that the whole state must take part in planning for the future of its coal producing regions. We cannot expect the coal industry to privide an adequate economic base for the people of the coal fields. The numbers I showed you this morning indicate that even when coal counties experienced dramatic economic growth, when production, employment and the price of coal rose dramatically, the quality of life in coal counties did not improve at a comparable rate. On top of these disappointing findings, the future expansion of coal employment looks dim.

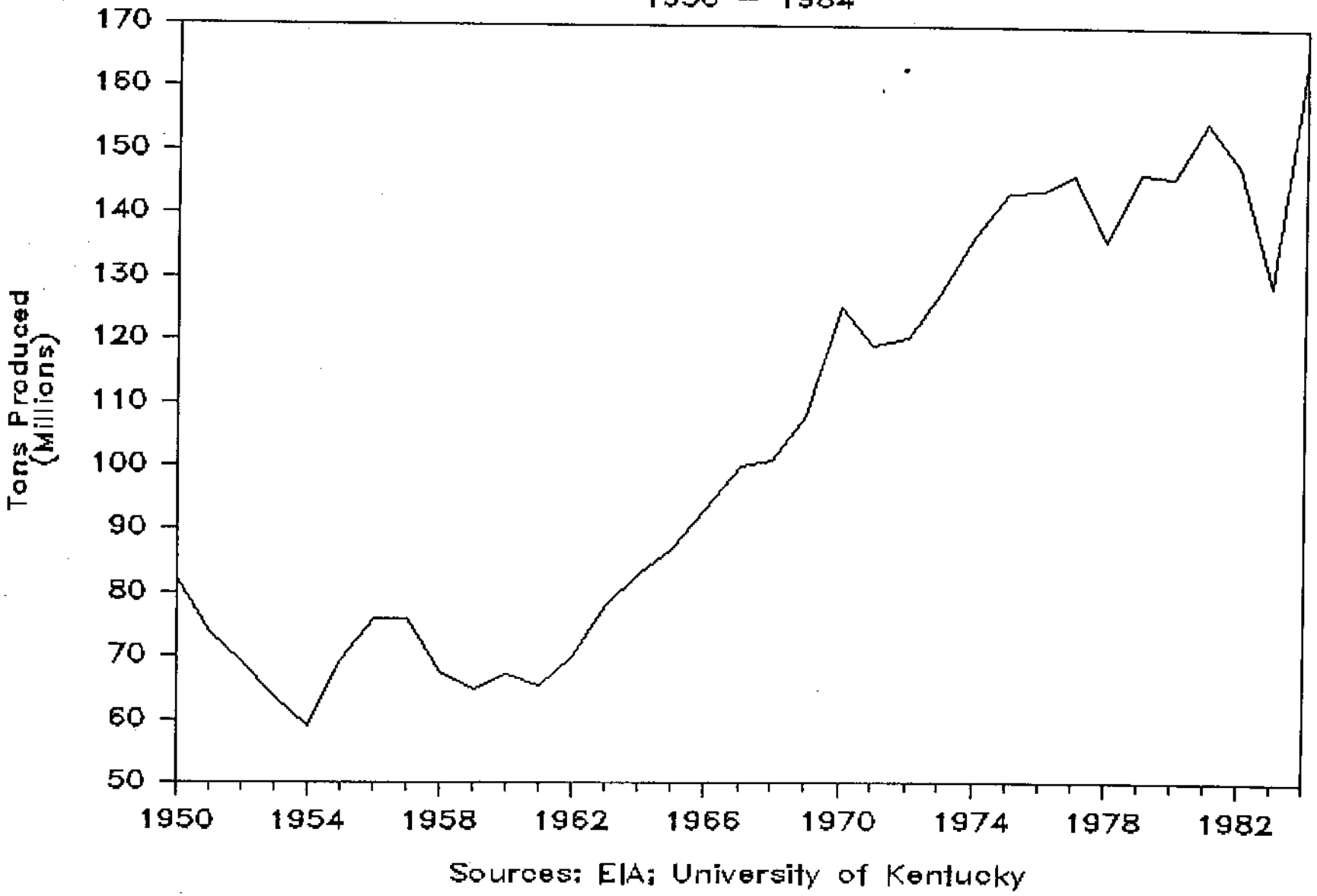
We are developing some ideas at MACED, but we think the real key to change is going to come out of energetic and constructive discussion in forums throughout the state, and particularly the coal fields. We think that the coal field counties have, in effect, been subsidizing cheap energy for American consumers all across the nation, as well as subsidizing the state of Kentucky. Your counties absorb the costs of roads, water problems and the ups and downs of coal demand, and that is the main reason that the

quality of life in coal counties lags behind the rest of the nation. As a nation and as a state, we have failed to develop a comprehensive economic policy. We have pieced together tax policies and environmental policies which are designed to promote growth in coal, protect American energy consumers, protect the environment, and protect the health and safety of miners. We have never devised policies to develop the coal fields.

APPENDIX

Kentucky Coal Production

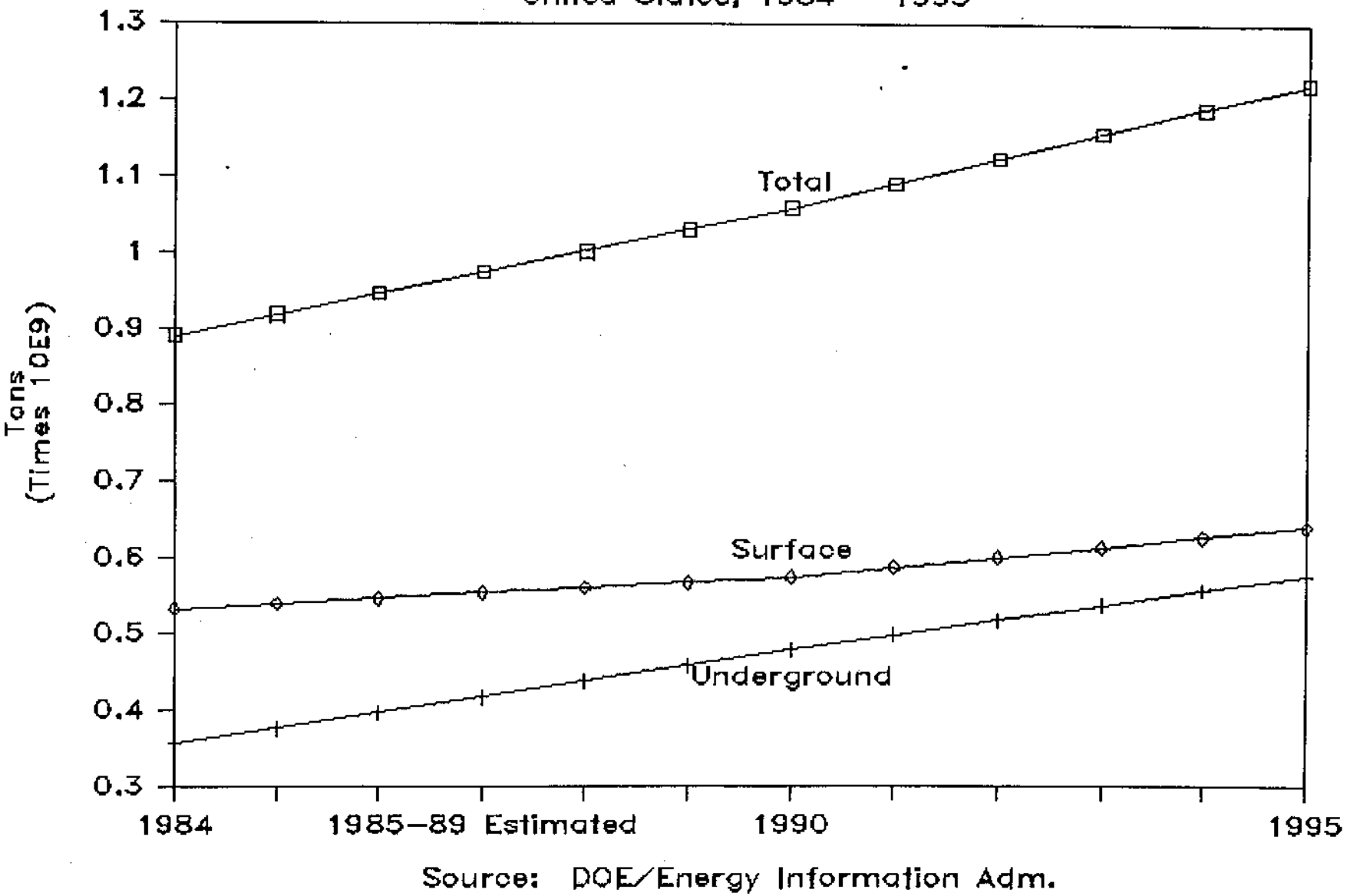
1950 – 1984



Sources: EIA; University of Kentucky

Projected Coal Production

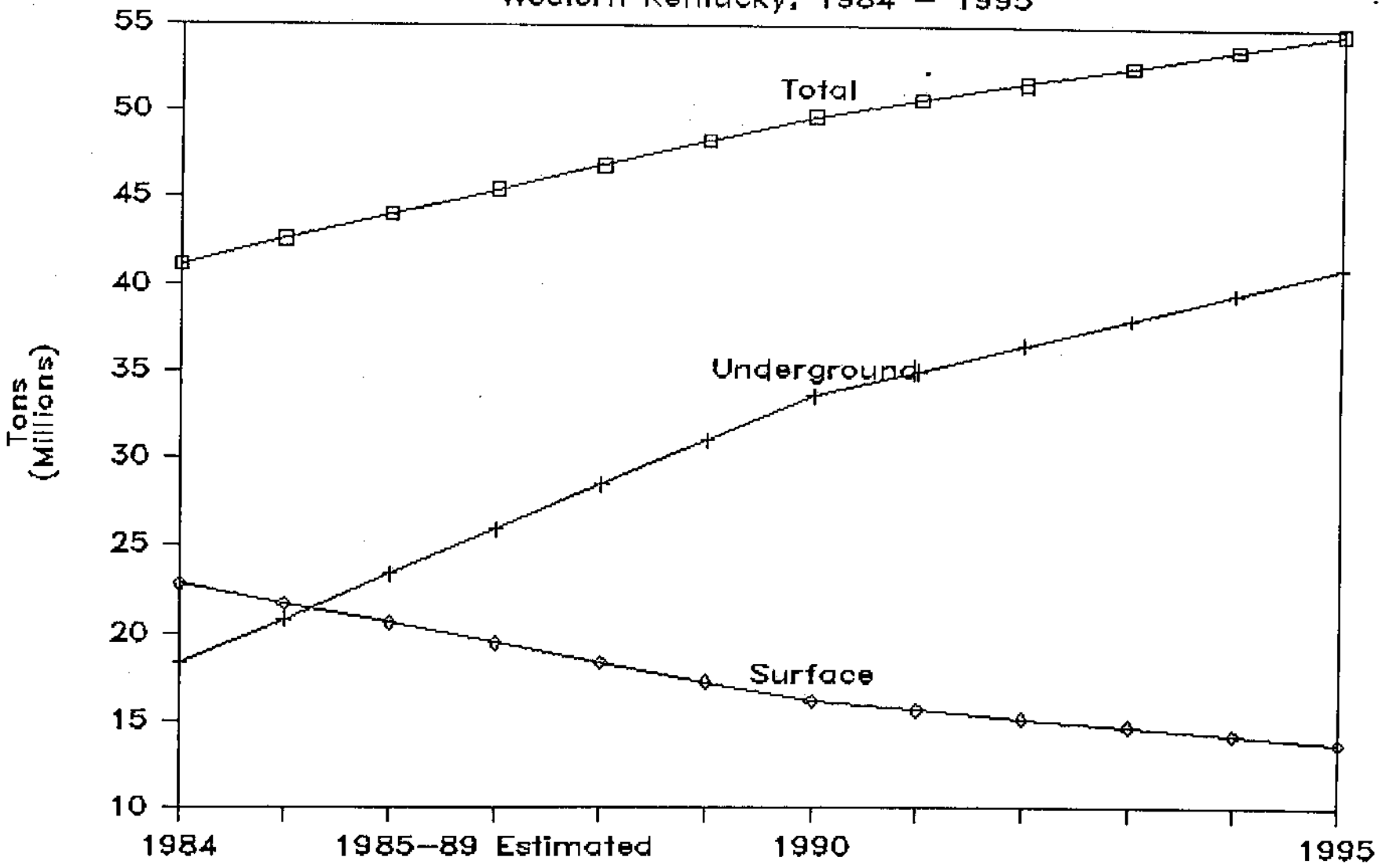
United States, 1984 – 1995



Source: DOE/Energy Information Adm.

Projected Coal Production

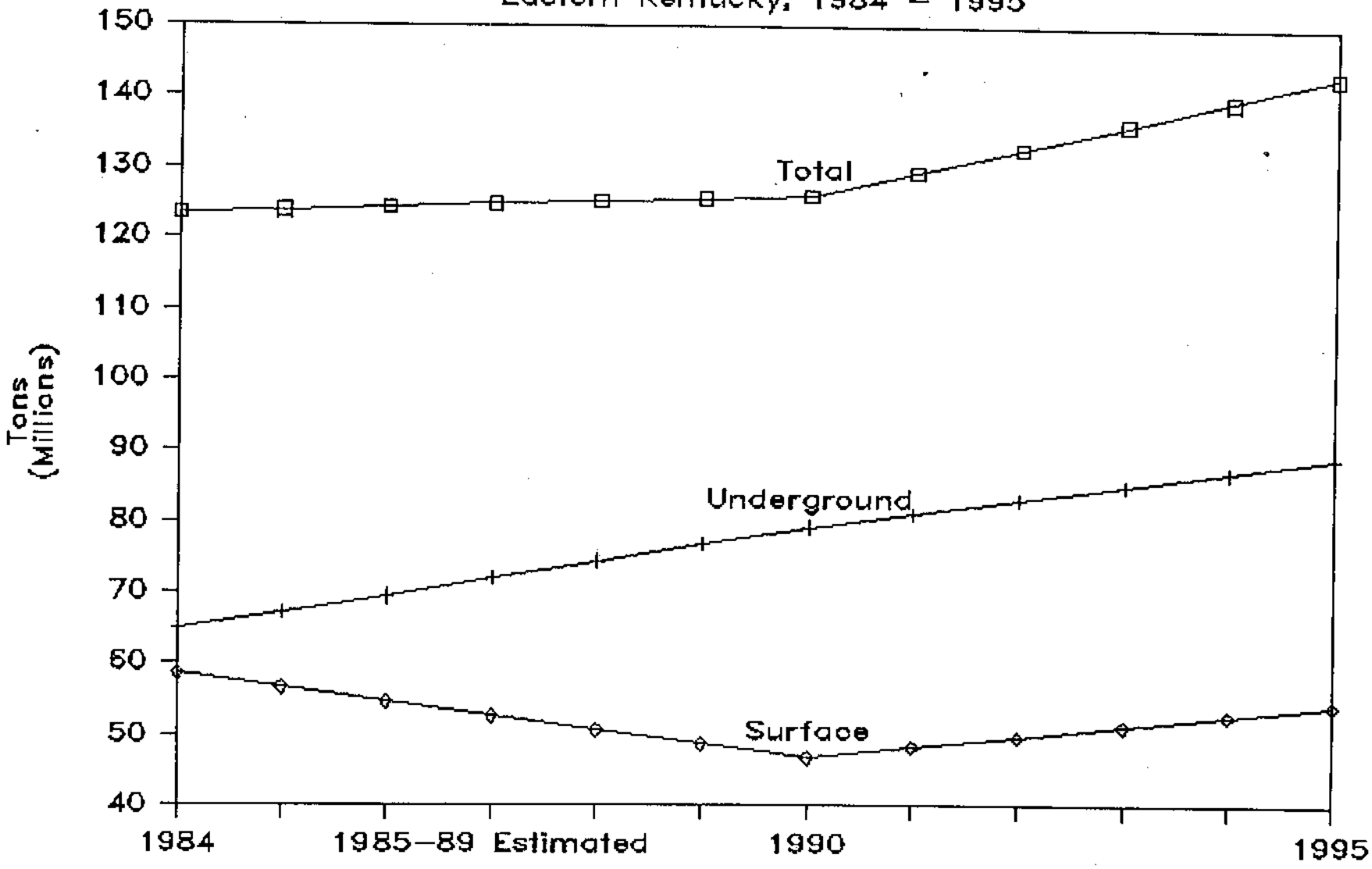
Western Kentucky, 1984 – 1995



Source: DOE/Energy Information Adm.

Projected Coal Production

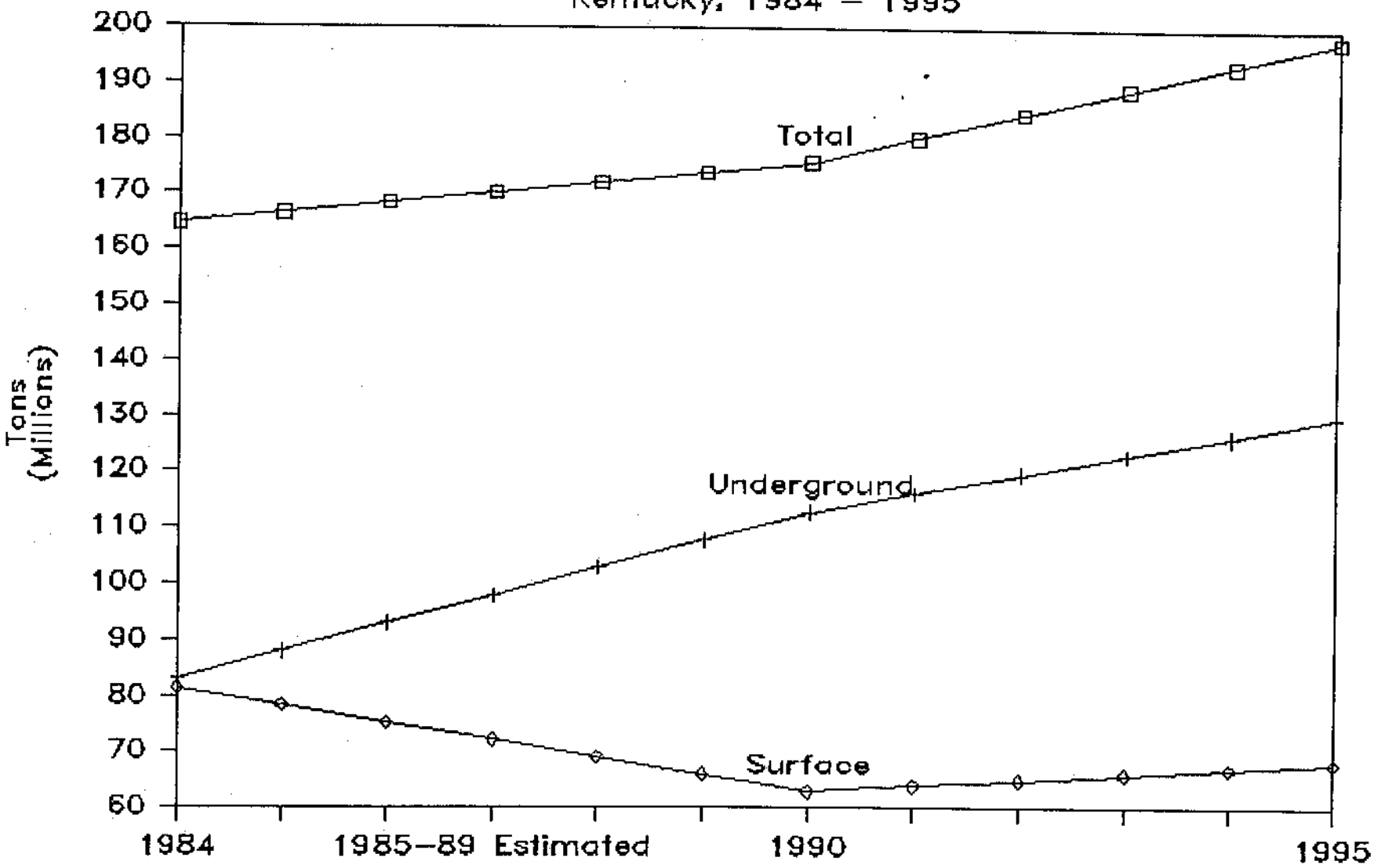
Eastern Kentucky, 1984 – 1995



Source: DOE/Energy Information Adm.

Projected Coal Production

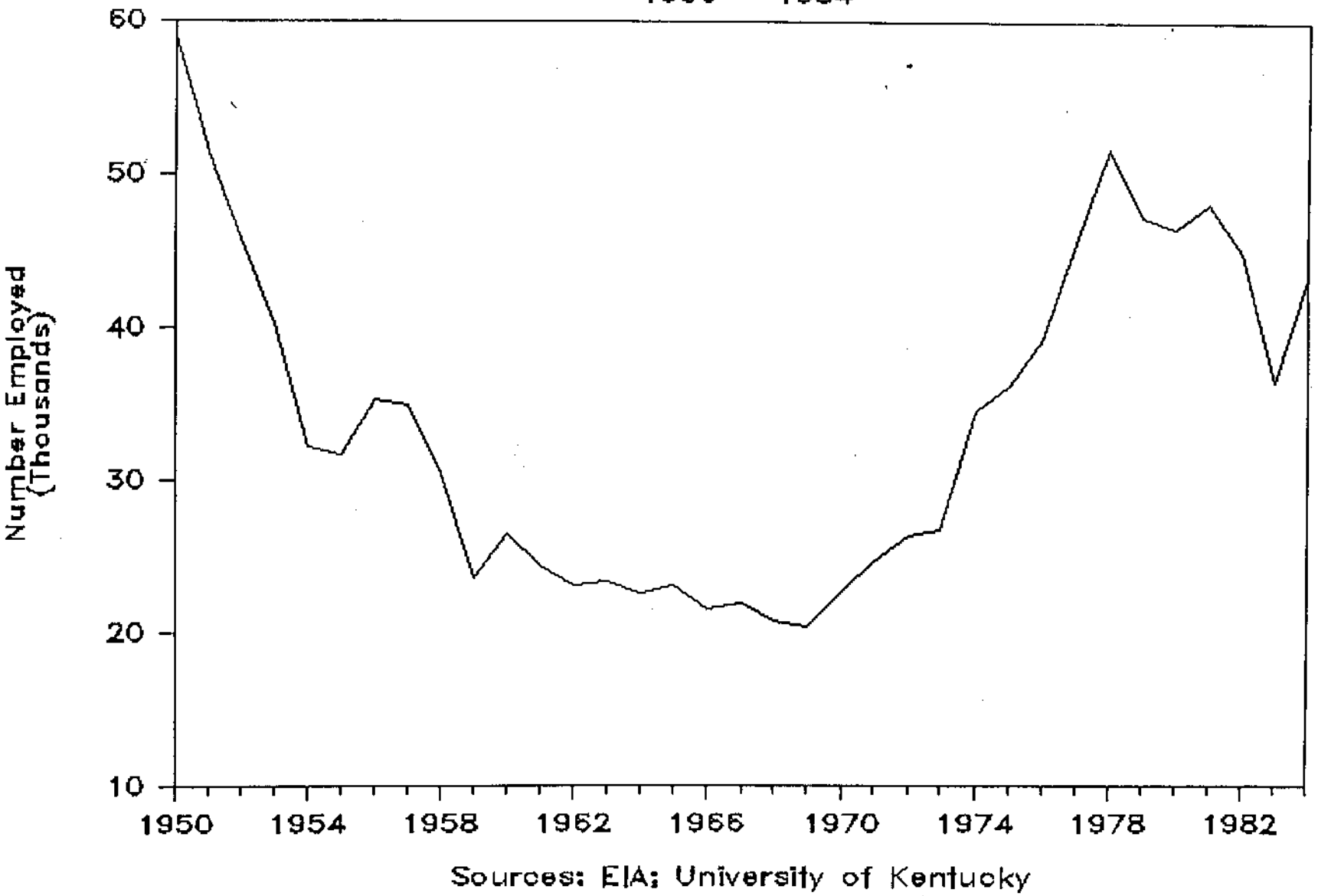
Kentucky, 1984 – 1995



Source: DOE/Energy Information Adm.

Kentucky Coal Mining Employment

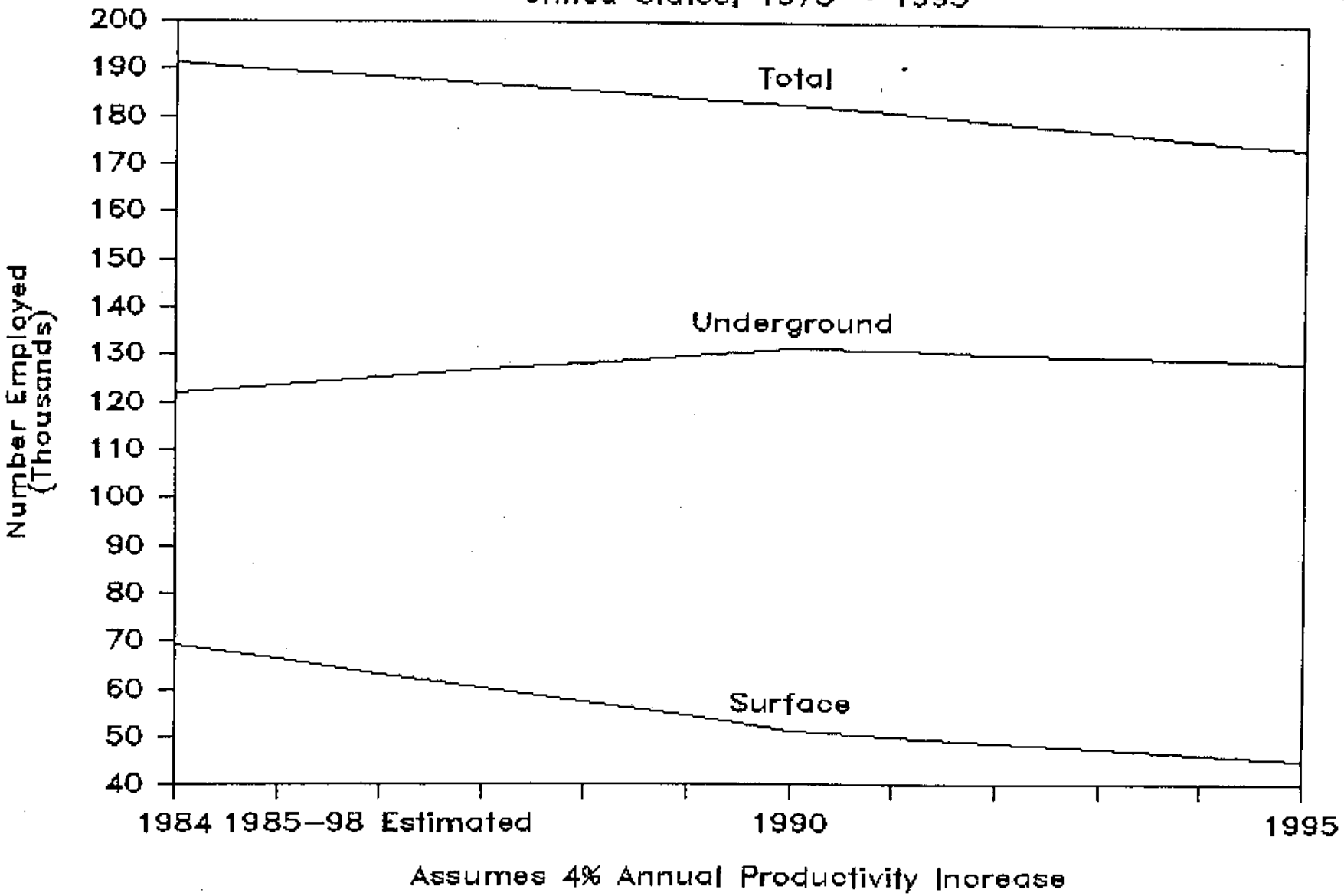
1950 – 1984



Sources: EIA; University of Kentucky

Coal Mining Projected Employment

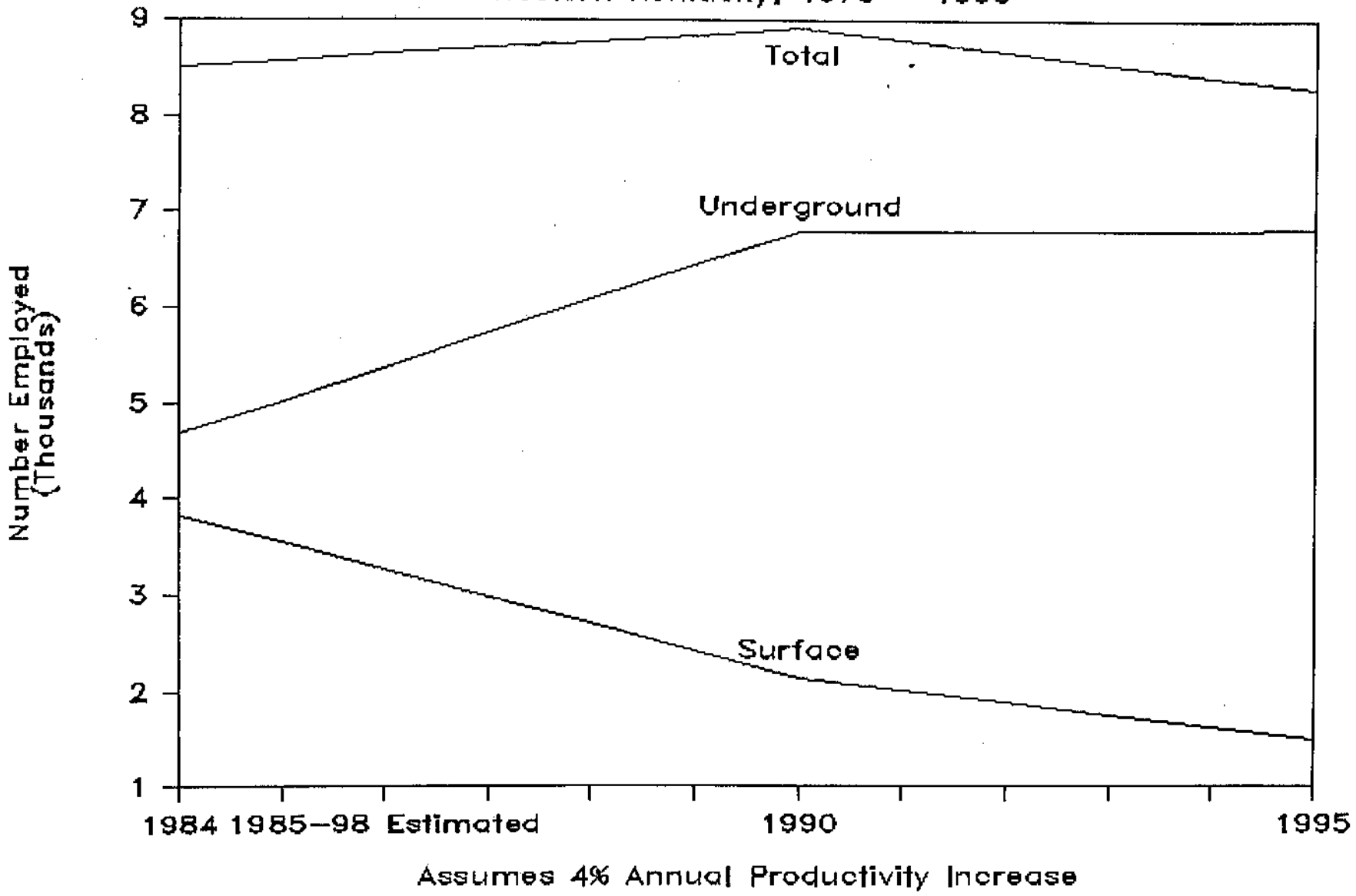
United States, 1975 – 1995



Assumes 4% Annual Productivity Increase

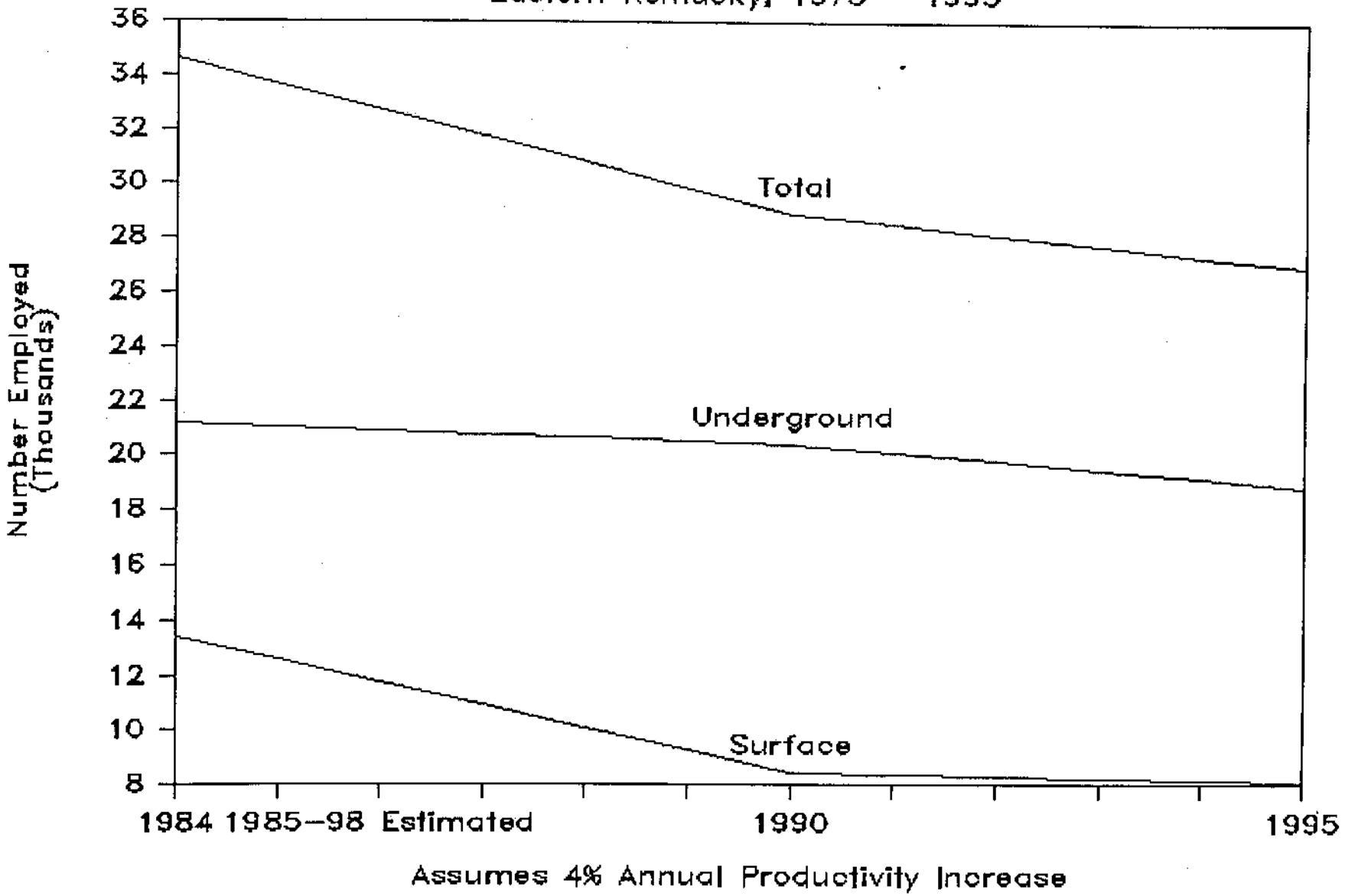
Coal Mining Projected Employment

Western Kentucky, 1975 – 1995



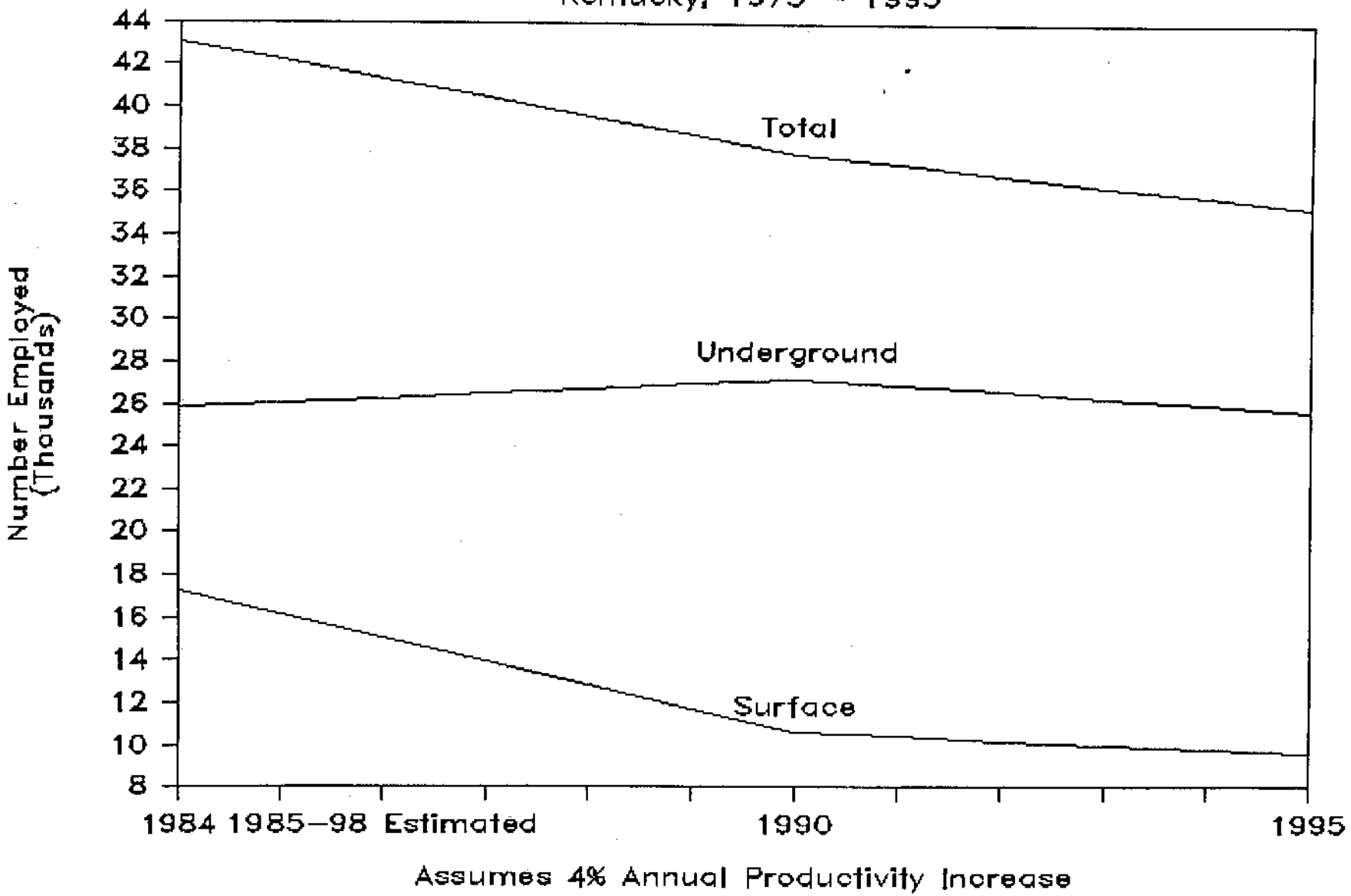
Coal Mining Projected Employment

Eastern Kentucky, 1975 – 1995



Coal Mining Projected Employment

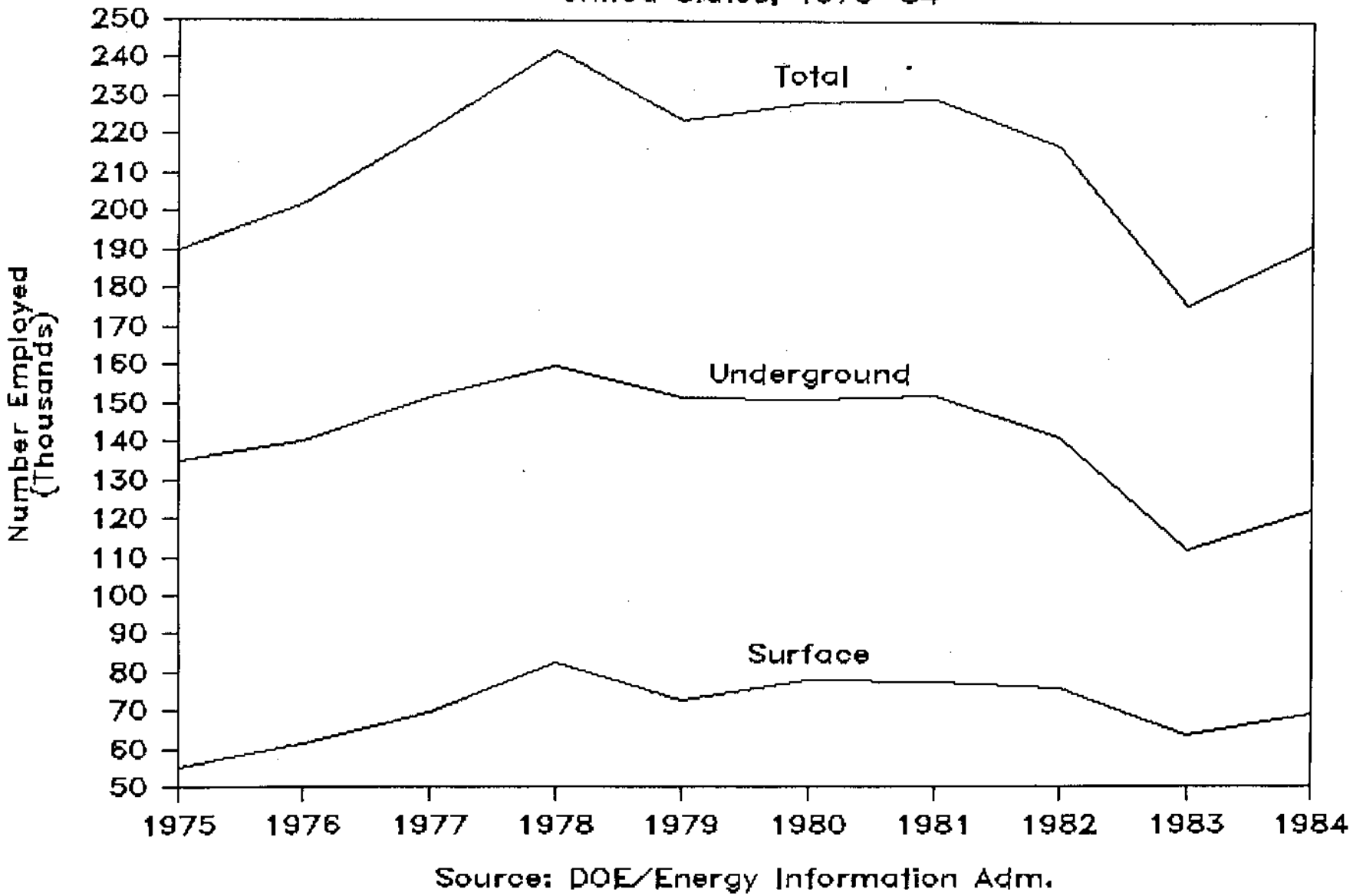
Kentucky, 1975 – 1995



Assumes 4% Annual Productivity Increase

Coal Mining Employment

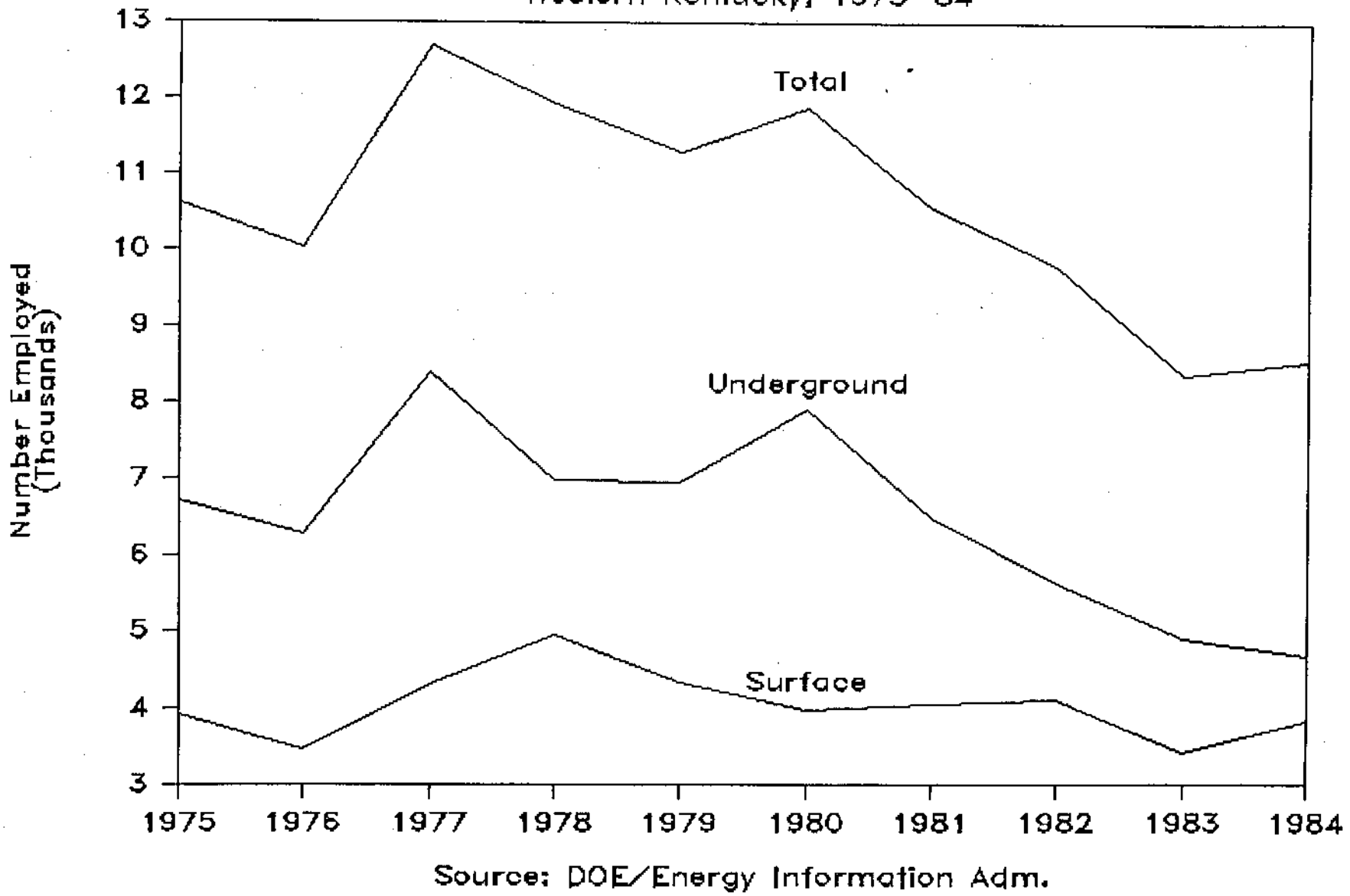
United States, 1975–84



Source: DOE/Energy Information Adm.

Coal Mining Employment

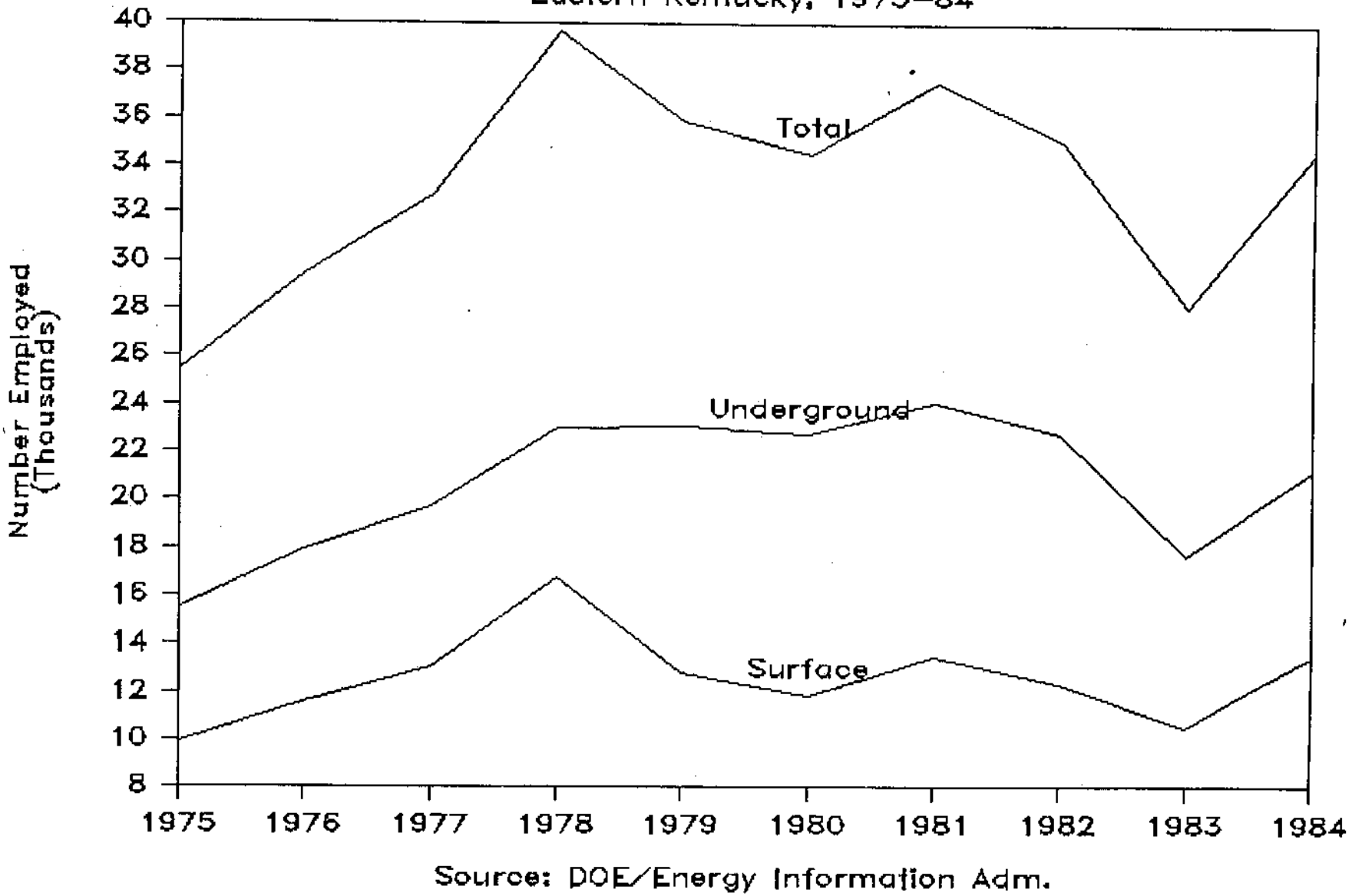
Western Kentucky, 1975–84



Source: DOE/Energy Information Adm.

Coal Mining Employment

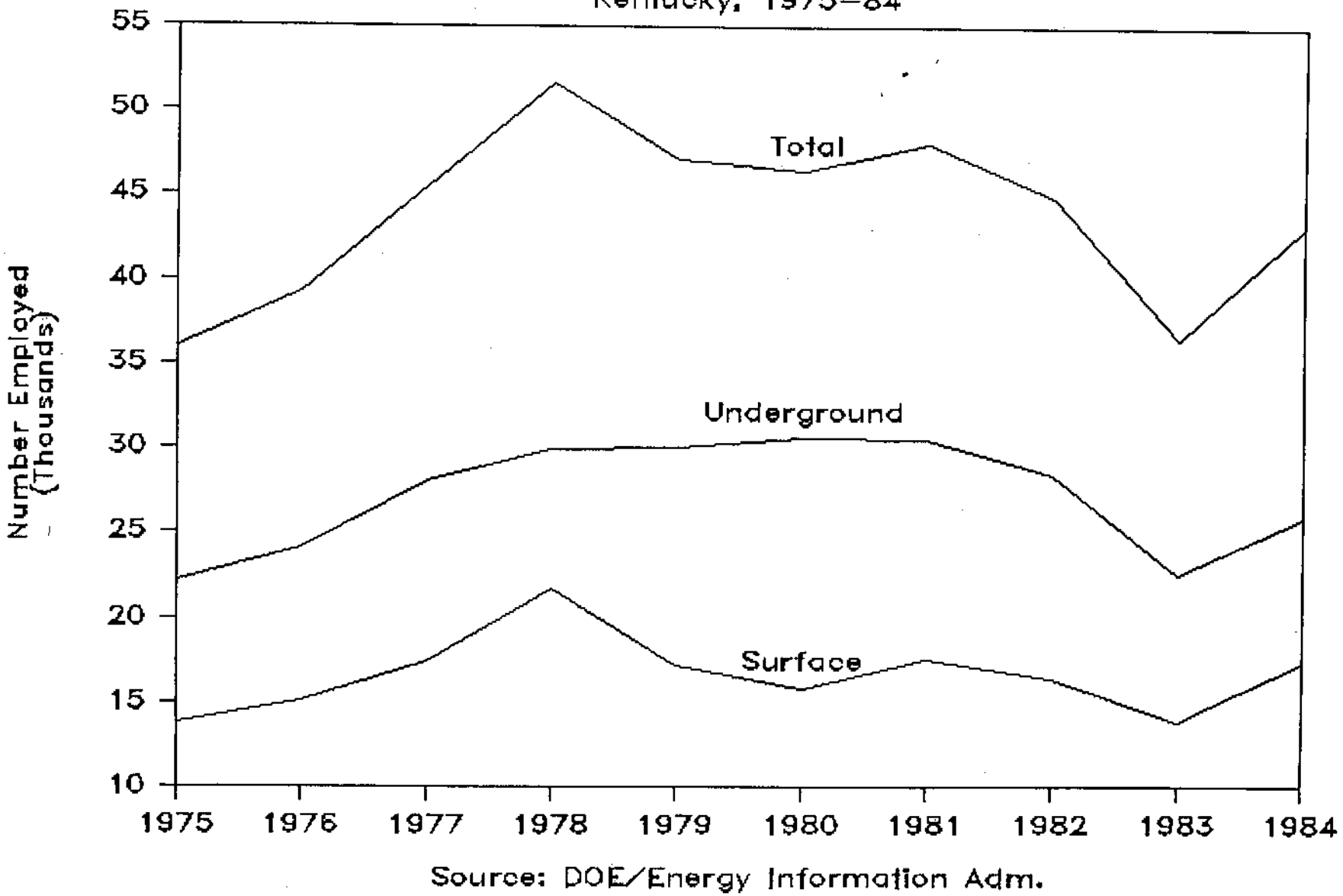
Eastern Kentucky, 1975–84



Source: DOE/Energy Information Adm.

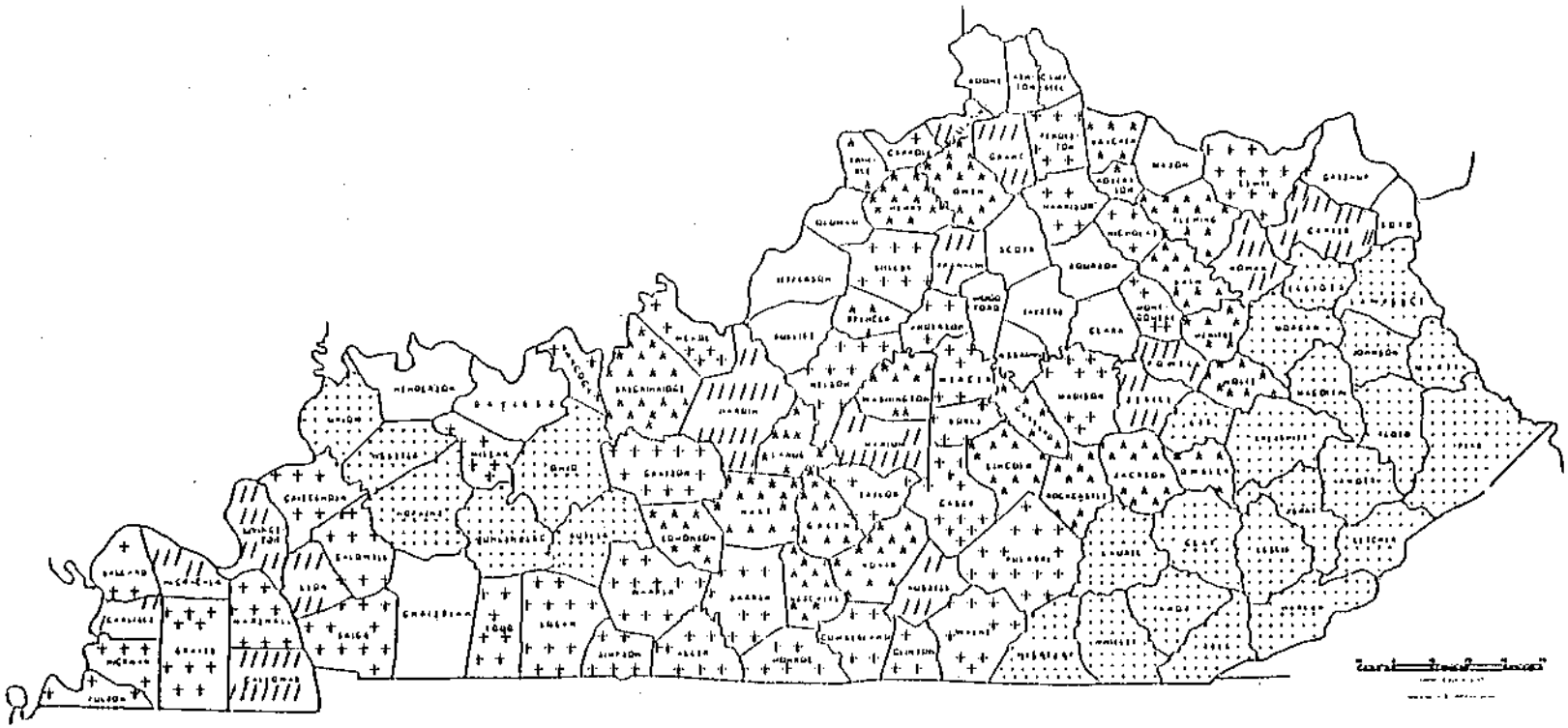
Coal Mining Employment

Kentucky, 1975–84



Source: DOE/Energy Information Adm.

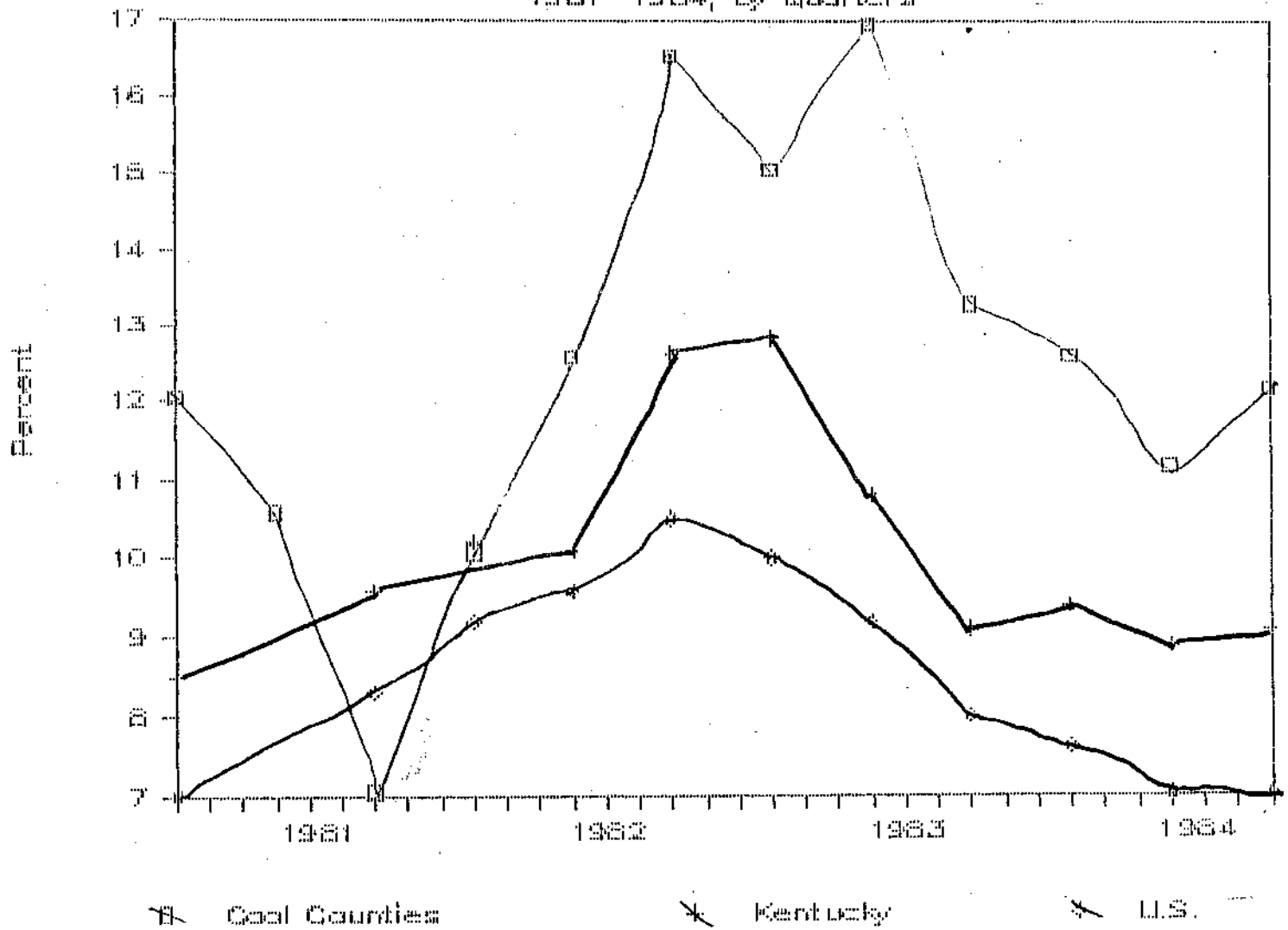
ECONOMIC BASE IN NONMETROPOLITAN KENTUCKY



... COAL /// GOVT-MIX *** FARM +++ MANU SMSA's

Unemployment in Coal Counties

1981 – 1984, by Quarters



March 20, 1985

For more information: Ms. Cynthia Duncan
MACED, 210 Center Street
Berea, KY 40403
(606) 986-2373

— PRESS RELEASE —

POLL SHOWS KENTUCKIANS SUPPORT PROPOSALS TO IMPROVE COAL COMMUNITIES

Kentuckians have expressed wide support for proposals to improve conditions in coal mining regions of the state, according to a recent survey commissioned by the Mountain Association for Community Economic Development (MACED). Four out of every five Kentucky adults interviewed believes that Kentucky should step up enforcement of existing laws and regulations in an effort to prevent coal mining from damaging the surrounding areas.

Another strong majority (83%) would favor coal communities negotiating with coal companies for help in paying for community services. Communities in some western states such as Colorado and Wyoming have been successful in getting direct help with community costs from coal companies.

Seventy percent of those surveyed also favor increasing Kentucky's coal severance tax if the additional revenue were used to finance improvements in coal county schools, water systems and roads. There was less consensus, however, on the use of coal tax money to attract new industry to coal mining areas. Forty-eight percent of the sample agreed that some tax

— more —

money should be set aside for this purpose, even if it meant less to spend on other programs, while 40% disagreed.

With coal mining employment dependent upon a fluctuating demand for energy, the possibility of stabilizing coal production with a national energy plan has been discussed. Such a plan would require utilities to use a certain amount of coal, as opposed to other fuels. When asked about this idea, 60% of the Kentuckians interviewed were in favor, and 22%, opposed. Not surprisingly, individuals living in coal producing parts of the state were much more likely to favor this proposal. Over two-thirds of those residing in the eastern and western coal fields, 71% and 72%, respectively, favored the national energy plan proposal. In contrast, just over half (53%) of those respondents not living in coal-producing areas favored it.

A majority of Kentuckians (54%) are ready for policy changes, even if it means some loss of coal mining jobs. However, thirty percent felt that Kentucky should make no changes because coal mining jobs would be lost, and 16% did not know. People living in rural areas and small towns were more concerned about potential loss of coal mining jobs (34% agreeing with the statement), than were residents of urban areas (20% in agreement). Cynthia Duncan, Research Director at MACED, believes these results indicate that Kentuckians are ready for policy proposals that return more of the benefits of mining to coal communities, "Kentuckians are fair-minded, and

the survey responses show that they are likely to support state initiatives to improve conditions in the coal fields."

The survey was conducted by the University of Kentucky Survey Research Center between October 15-26, 1984. A total of 743 Kentucky citizens eighteen years of age and older were interviewed by telephone. The margin of error for all questions was plus or minus four percent at the 95% confidence interval. This means that the results reported can be expected to vary by no more than four percent in either direction from what would have been obtained if every residential telephone number in the state had been called.

###

Now I'd like to change the subject just a bit and talk about issues related to coal mining in Kentucky. People have suggested a number of changes to help solve problems in coal counties such as bad roads, water pollution, and inadequate funds for schools. I'd like to ask you about some of these.

Do you think we should stabilize coal production with a national energy plan that would require utilities to use a certain amount of coal as opposed to other fuels?

Yes	419	56.9	60.4
Yes, depends	26	3.5	
No	163	22.1	
Don't know	129	17.5	
Refused	3	-	
Not asked	3	-	

Do you think we should step up enforcement of existing laws and regulations to prevent mining from damaging coal areas?

Yes	601	81.2
No	73	9.9
Don't know	66	8.9
Refused	1	-
Not asked	2	-

Communities in western states like Colorado and Wyoming have negotiated with coal companies for help in paying for roads, schools, and other community services. Do you think coal communities in Kentucky should do the same thing?

Yes	609	82.5
No	49	6.6
Don't know	80	10.8
Refused	2	-
Not asked	3	-

Right now, the tax on coal production in Kentucky is about four percent. Some states have no severance tax at all. Others have tax rates that are five to six times higher than Kentucky's. If the money were to be used for the improvement of schools, roads, and water systems in coal-producing counties, would you favor or oppose increasing Kentucky's coal severance tax?

Favor	515	69.8
Oppose	108	14.6
Don't know	115	15.6
Refused	1	-
Not asked	4	-

Some people think that a portion of the money obtained from coal taxes should be set aside to attract new industry to coal counties, even if it means that there is less to spend on other programs. Do you agree or disagree?

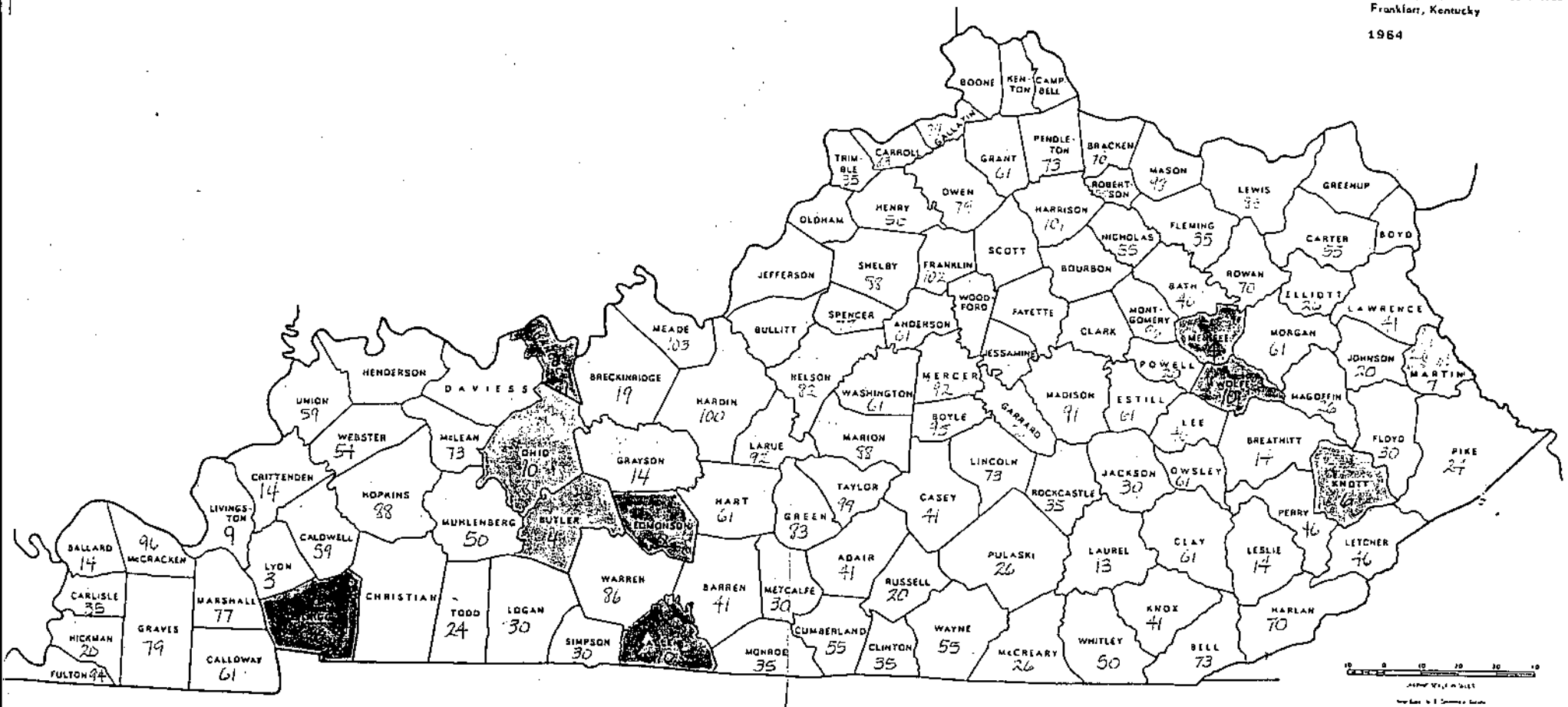
Agree	352	47.9
Disagree	290	39.5
Don't know	93	12.7
Refused	2	-
Not asked	6	-

Some people also say we should make no changes in laws and policies related to the coal industry because changes might means the loss of coal mining jobs. Do you agree or disagree?

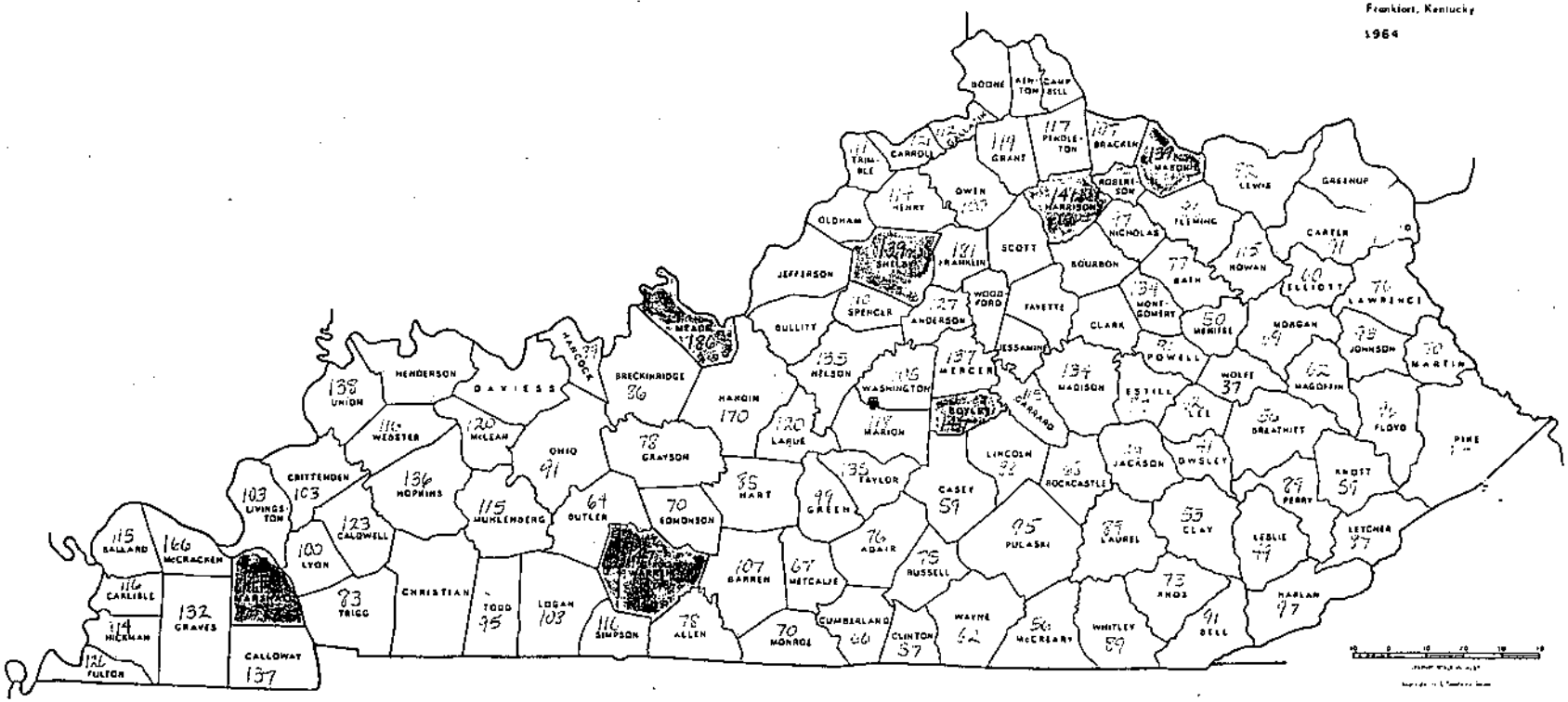
Agree	217	29.7
Disagree	396	54.2
Don't know	118	16.1
Refused	3	-
Not asked	9	-

TEN COUNTIES "MOST IMPROVED"

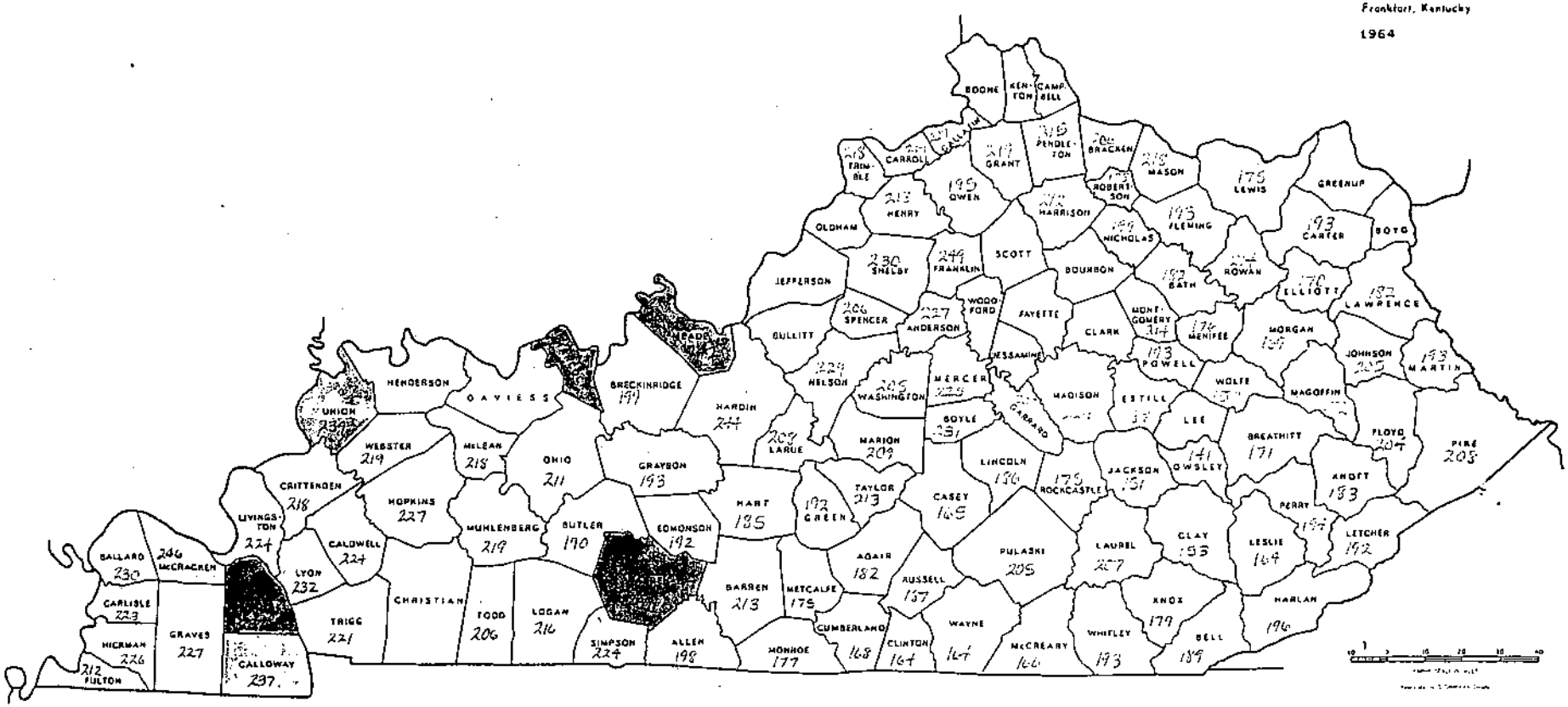
1960–1980



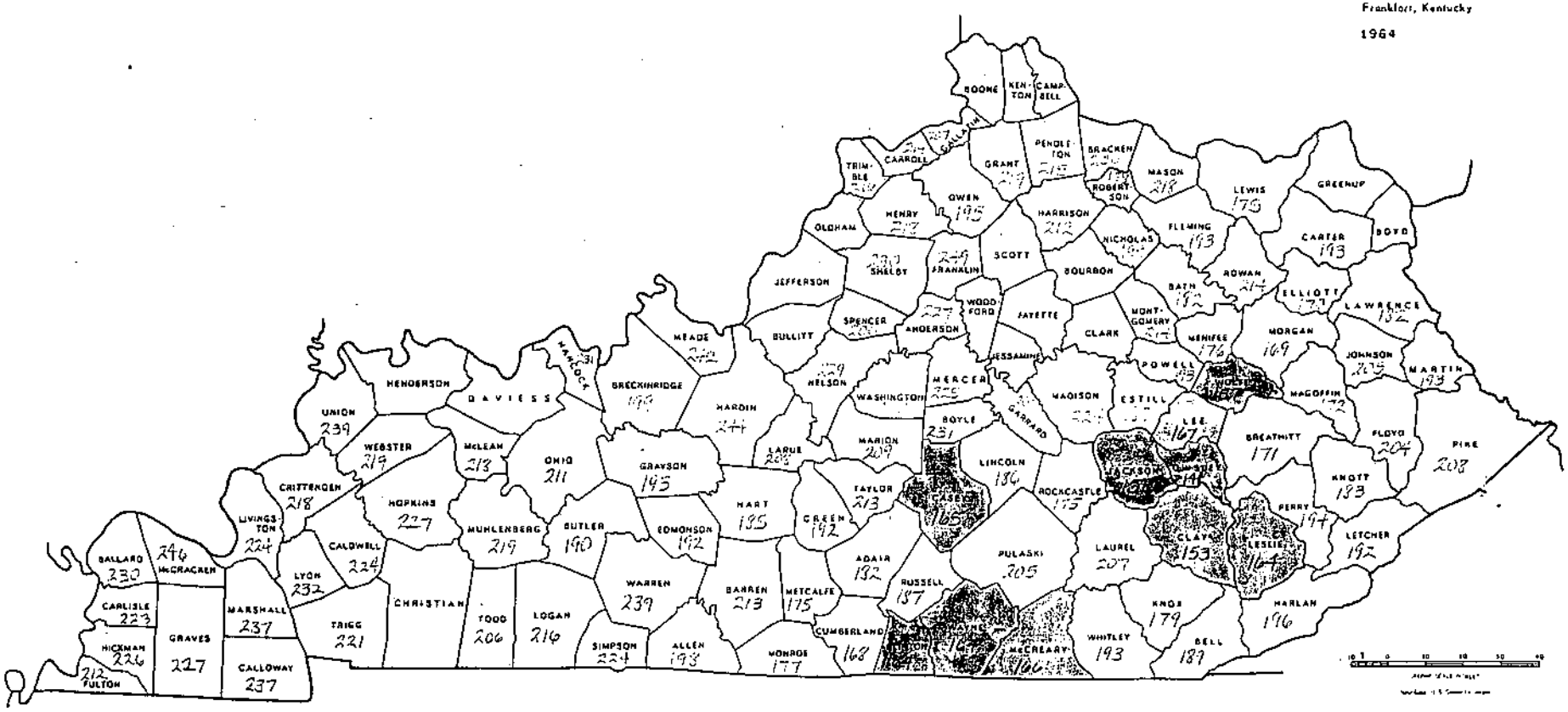
TEN "MOST DEVELOPED" COUNTIES, 1960



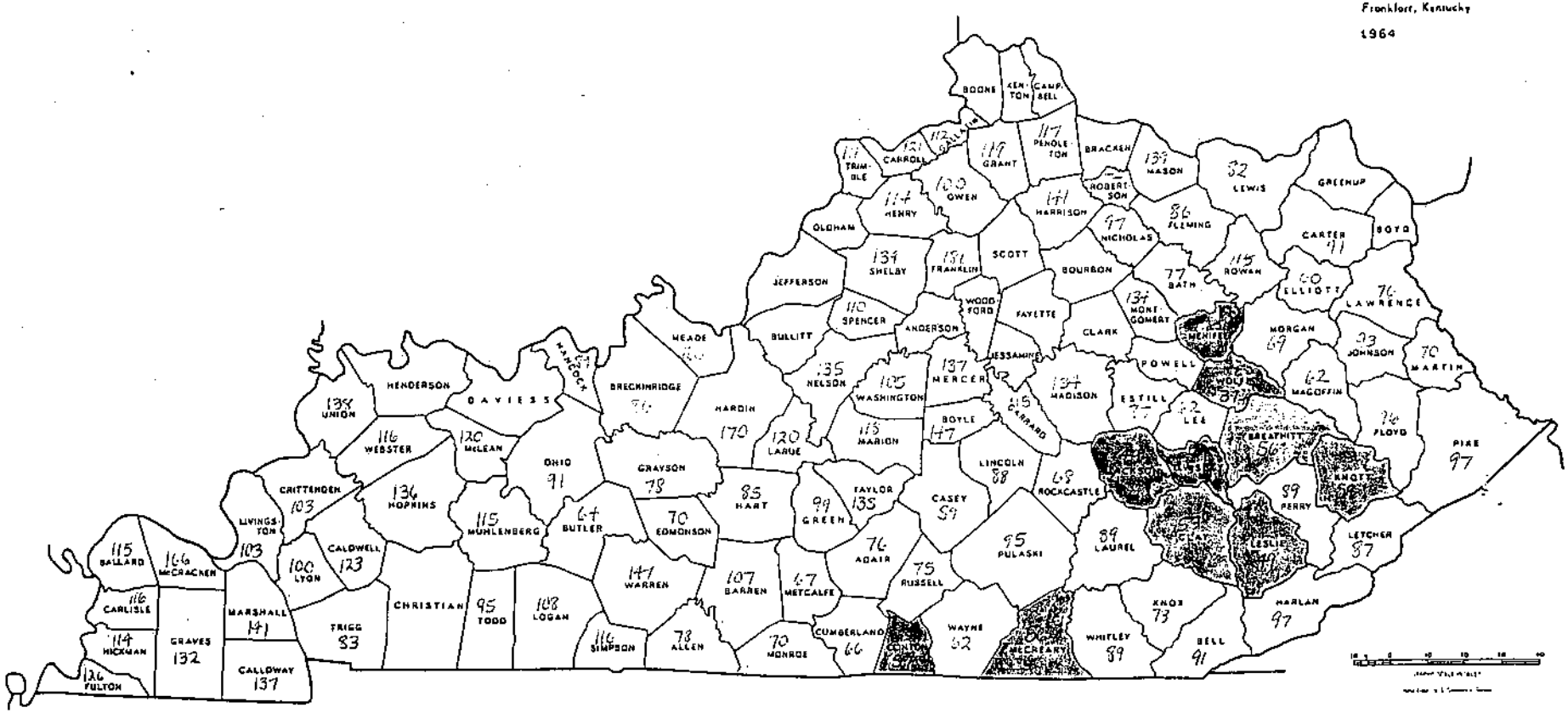
TEN "MOST DEVELOPED" COUNTIES, 1980



TEN "LEAST DEVELOPED" COUNTIES, 1980



TEN "LEAST DEVELOPED" COUNTIES, 1960



CONAME01	GROWTH	DEVEL60	DEVEL80	DEVDIFF	LOINC60	LOINC80
BELL	174	91	189	98	59	31
BREA	225	56	171	115	76	39
BUTL	192	64	190	126	63	26
CLAY	165	53	153	100	73	44
ELLI	172	60	170	110	65	34
FLOY	122	96	204	108	53	24
HARL	145	97	196	99	49	27
HOPK	105	136	227	91	39	17
JOHN	206	93	205	112	57	26
KNOT	209	59	183	124	71	33
KNOX	153	73	179	106	70	37
LAUR	78	89	207	118	61	25
LAWR	162	76	182	106	64	34
LEE	90	62	167	105	66	40
LESL	173	49	164	115	73	39
LETC	132	87	192	105	55	28
MCCR	123	56	166	110	72	43
MAGO	237	62	172	110	76	36
MART	446	70	193	123	63	29
MORG	100	69	169	100	67	41
MUHL	103	115	219	104	46	19
OHIO	154	91	211	120	57	23
PERR	154	89	194	105	55	26
PIKE	185	97	208	111	53	22
UNIO	123	138	239	101	42	14
WEBS	177	116	219	103	47	20
WHIT	123	89	193	104	62	31
All KY AVG	106	108	207	99	51	25

GROWTH — Percent change in earned income, 1960-1980, constant dollars

DEVEL60 — Index adding percent families not low income, plus percent adults with high school education, plus percent housing units with complete plumbing (1960)

DEVEL80 — Index for 1980

DEVDIFF — Change in development index, 1980 minus 1960

LOINC60 — Percent families with incomes below $3000, 1960

LOINC80 — Percent families with incomes below $7500, 1980

CONAME01	PPLUMB60	PPLUM80	PHIGHS60	PHIGHS80	AVGERN80	AVGPAY80
BELL	32	84.35	18	36	14942	267
BREA	20	72.36	12	37	17158	359
BUTL	13	81.75	14	35	8661	185
CLAY	15	69.63	10	28	13690	262
ELLI	15	73.10	9	31	8083	220
FLOY	33	88.29	16	40	16346	284
HARL	28	84.52	18	38	17754	317
HOPK	52	94.05	23	50	14601	274
JOHN	32	87.73	19	43	12919	237
KNOT	20	80.28	11	36	15691	266
KNOX	27	80.36	16	36	11700	215
LAUR	33	89.02	18	42	11809	233
LAWR	26	79.80	14	36	11458	220
LEE	14	71.75	13	35	10503	212
LESL	13	72.45	9	31	12357	235
LETC	28	81.84	13	38	16972	296
MCCR	19	80.25	9	29	10423	202
MAGO	23	78.88	15	30	13232	282
MART	23	87.20	10	34	27969	483
MORG	23	79.67	14	30	9717	219
MUHL	40	93.43	20	45	17192	316
OHIO	32	89.69	17	44	13792	298
PERR	27	82.81	16	37	17307	302
PIKE	34	91.75	16	38	18952	320
UNIO	51	96.63	30	56	15616	332
WEBS	40	91.69	23	47	14448	314
WHIT	34	83.79	18	41	12041	220
ALL KY AVG	38	87	21	45	10866	223

PPLUMB60 Percent housing units with complete plumbing, 1960

PPLUM80 Percent housing units with complete plumbing, 1980

PHIGHS60 Percent adults with high school education, 1960

PHIGHS80 Percent adults with high school education, 1980

AVGERN80 Average annual earnings per job, 1980

AVGPAY80 Average weekly wage, 1980

CONAME01	PCTWKAGE	PCTNOWKR	UNEMKIDS	INCPC80	MFAINC79	PCTTRN80	PCTERN80	PSIXTY80
BELL	56	27	35	6476	11913	26	63	12
BREA	55	28	37	5203	10796	26	66	10
BUTL	56	18	26	5215	13013	25	67	14
CLAY	54	30	51	5092	8901	27	65	10
ELLI	55	18	30	4460	10961	22	66	11
FLOY	57	23	36	6127	14374	25	65	10
HARL	56	25	39	6719	13376	25	66	11
HOPK	57	14	24	9215	18442	17	72	13
JOHN	57	21	32	6553	14209	22	67	11
KNOT	55	28	37	5199	12085	26	67	9
KNOX	55	29	42	4925	10425	26	63	12
LAUR	57	18	31	5669	13390	20	69	11
LAWR	55	25	44	5709	11500	24	68	13
LEE	54	30	24	4440	9506	34	56	15
LESL	56	31	47	4677	10728	27	68	8
LETC	56	26	36	5971	12702	26	66	10
MCCR	54	28	39	4016	8746	38	55	10
MAGO	55	25	47	4885	10721	25	65	9
MART	54	22	40	6885	15646	17	76	8
MORG	56	22	44	4500	9114	27	62	12
MUHL	57	18	31	8148	17130	19	69	14
OHIO	56	17	29	7083	16150	19	70	14
PERR	56	24	43	6326	14084	25	68	10
PIKE	58	22	29	7196	15436	18	72	8
UNIO	57	13	46	7876	19739	13	71	11
WEBS	55	19	32	8808	16904	18	69	16
WHIT	57	22	26	6414	11823	30	60	12
ALL KY AVG	57	16	25	6376	14435	20	67	12

PCIWKAGE Percent of the poulation over 16 years of age, 1980

PCTNOWKR Percent of families with no worker in 1979

UNEMKIDS Percent of 16-19 year olds not in school, not working, not looking for work, and not in the army

INCPC80 Per capita income, 1980

MFAINC79 Median family income, 1979

PCTTRN80 Percent of total income from transfer payments, 1980

PCTERN80 Percent of total income from earnings, 1980

PSIXTY80 Percent of population 65 years and older

PROPORTION OF POPULATION 16 YEARS AND OLDER EMPLOYED, 1980 AND 1982

COUNTY NAME	Population 16 and Over 1980	Employment 1980	Percent Employed 1980	Population 16 and Over 1982	Employment 1982	Percent Employed 1982
BELL	24670	11553	0.47	24773	11661	0.47
BREATHITT	11797	6635	0.56	11691	6477	0.55
BUTLER	8239	3325	0.40	8153	3396	0.42
CLAY	15584	6798	0.44	15872	7464	0.47
ELLIOTT	4807	3174	0.66	4781	2378	0.50
FLOYD	34586	13805	0.40	35440	14423	0.41
HARLAN	29604	11254	0.38	30194	11074	0.37
HOPKINS	34308	20710	0.60	34658	19748	0.57
JOHNSON	17737	7902	0.45	18015	8216	0.46
KNOTT	12354	4089	0.33	12572	4435	0.35
KNOX	21268	10963	0.52	21415	10428	0.49
LAUREL	27940	17604	0.63	28759	19426	0.68
LAWRENCE	10147	3349	0.33	10230	3472	0.34
LEE	5679	1688	0.30	5610	1813	0.32
LESLIE	10116	4066	0.40	10346	4060	0.39
LETCHER	21458	5960	0.28	21494	5536	0.26
MCCREARY	10765	4086	0.38	11068	4651	0.42
MAGOFFIN	9128	4577	0.50	9345	5311	0.57
MARTIN	9251	8097	0.88	9585	7979	0.83
MORGAN	8712	4631	0.53	8791	4614	0.52
MUHLENBERG	23936	12818	0.54	23787	13492	0.57
OHIO	16003	10909	0.68	15707	10011	0.64
PERRY	23449	11265	0.48	23697	11083	0.47
PIKE	56849	28456	0.50	57559	30455	0.53
UNION	13457	9178	0.68	13469	9482	0.70
WEBSTER	11088	6605	0.60	11051	5987	0.54
WHITLEY	24407	9325	0.38	24744	9018	0.36
AVERAGE (ALL Ky EXCEPT Fayette County)	22845	12866	0.54	22980	12664	0.53

PROPORTION OF POPULATION 16 YEARS AND OLDER EMPLOYED, 1984

COUNTY NAME	Population 16 and Over 1982	Employment 1984	Percent Employed 1984
BELL	24773	11455	0.46
BREATHITT	11691	6249	0.53
BUTLER	8153	3418	0.42
CLAY	15872	8043	0.51
ELLIOTT	4781	2664	0.56
FLOYD	35440	13431	0.38
HARLAN	30194	10653	0.35
HOPKINS	34658	19289	0.56
JOHNSON	18015	7931	0.44
KNOTT	12572	4132	0.33
KNOX	21415	11082	0.52
LAUREL	28759	20384	0.71
LAWRENCE	10230	3824	0.37
LEE	5610	2024	0.36
LESLIE	10346	3863	0.37
LETCHER	21494	5628	0.26
MCCREARY	11068	4234	0.38
MAGOFFIN	9345	5464	0.58
MARTIN	9585	7355	0.77
MORGAN	8791	4024	0.46
MUHLENBERG	23787	12178	0.51
OHIO	15707	10487	0.67
PERRY	23697	10555	0.45
PIKE	57559	28033	0.49
UNION	13469	8774	0.65
WEBSTER	11051	5338	0.48
WHITLEY	24744	9091	0.37
AVERAGE (ALL Ky EXCEPT Fayette County)	22980	13076	0.55

COAL COUNTY TAX RECEIPTS

COUNTIES	POPULATION YEAR 1980	KENTUCKY INDIVIDUAL INCOME TAX ROUNDED TO 000	KENTUCKY INDIVIDUAL INCOME TAX PERCAPITA	SALES AND USE TAX RECEIPTS ROUNDED TO 000	SALES AND USE TAX RECEIPTS PERCAPITA
BELL	34330	4235	123	7501	218
BREATHITT	17004	1847	109	1302	77
BUTLER	11064	1043	94	709	64
CLAY	22752	2102	92	2562	113
ELLIOTT	6908	443	64	252	36
FLOYD	48764	6462	133	7434	152
HARLAN	41889	6132	146	7679	183
HOPKINS	46174	8704	189	10076	218
JOHNSON	24432	3451	141	4654	190
KNOTT	17940	2012	112	1168	65
KNOX	30239	2592	86	3249	107
LAUREL	38982	4616	118	6661	171
LAWRENCE	14121	1536	109	1281	91
LEE	7754	619	80	708	91
LESLIE	14882	1740	117	816	55
LETCHER	30687	3935	128	4235	138
McCREARY	15634	1025	66	1047	67
MAGOFFIN	13515	1332	99	813	60
MARTIN	13925	2532	182	2522	181
MORGAN	12103	945	78	929	77
MUHLENBERG	32238	5163	160	4187	130
OHIO	21765	2881	132	2814	129
PERRY	33763	5407	160	7066	209
PIKE	81123	13536	167	15906	196
UNION	17821	3083	173	3111	175
WEBSTER	14832	2677	180	1542	104
WHITLEY	33396	3497	105	9020	270

COAL COUNTY REVENUE

COUNTIES	POPULATION YEAR 1980	TOTAL REVENUE	TOTAL REVENUE PERCAPITA	FEDERAL GOVERNMENT REVENUE	FEDERAL GOVERNMENT REVENUE PERCAPITA
BELL	34,330	2,224,000	64.78	356,000	10.37
BREATHITT	17,004	2,359,000	138.73	338,000	19.88
BUTLER	11,064	1,480,000	133.77	185,000	16.72
CLAY	22,752	4,895,000	215.15	1,405,000	61.75
ELLIOTT	6,908	1,169,000	169.22	113,000	16.36
FLOYD	48,764	2,974,000	60.99	346,000	7.10
HARLAN	41,889	5,895,000	140.73	2,111,000	50.40
HOPKINS	46,174	4,416,000	95.64	364,000	7.88
JOHNSON	24,432	4,509,000	184.55	576,000	23.58
KNOTT	17,940	2,109,000	117.56	256,000	14.27
KNOX	30,239	4,837,000	159.96	325,000	10.75
LAUREL	38,982	1,745,000	44.76	211,000	5.41
LAWRENCE	14,121	1,783,000	126.27	244,000	17.28
LEE	7,754	1,529,000	197.19	194,000	25.02
LESLIE	14,882	2,170,000	145.81	276,000	18.55
LETCHER	30,687	2,713,000	88.41	300,000	9.78
McCREARY	15,634	1,719,000	109.95	227,000	14.52
MAGOFFIN	13,515	2,357,000	174.40	192,000	14.21
MARTIN	13,925	2,936,000	210.84	245,000	17.59
MORGAN	12,103	1,389,000	114.76	243,000	20.08
MUHLENBERG	32,238	3,851,000	119.46	306,000	9.49
OHIO	21,765	5,490,000	252.24	176,000	8.09
PERRY	33,763	3,067,000	90.84	264,000	7.82
PIKE	81,123	7,701,000	94.93	807,000	9.95
UNION	17,821	3,031,000	170.08	215,000	12.06
WEBSTER	14,832	2,148,000	144.82	169,000	11.39
WHITLEY	33,396	2,778,000	83.18	357,000	10.69

COAL COUNTY REVENUE, continued

COUNTIES	STATE GOVERNMENT REVENUE	STATE GOVERNMENT REVENUE PERCAPITA	TOTAL GENERAL REVENUE OWN SOURCES	TOTAL GENERAL REVENUE OWN SOURCES PERCAPITA
BELL	1,039,000	30.27	829,000	24.15
BREATHITT	1,689,000	99.33	332,000	19.52
BUTLER	860,000	77.73	393,000	35.52
CLAY	3,116,000	136.95	374,000	16.44
ELLIOTT	797,000	115.37	259,000	37.49
FLOYD	1,839,000	37.71	789,000	16.18
HARLAN	2,235,000	53.36	1,501,000	35.83
HOPKINS	2,283,000	49.44	1,760,000	38.12
JOHNSON	3,399,000	139.12	534,000	21.86
KNOTT	1,523,000	84.89	330,000	18.39
KNOX	1,658,000	54.83	2,850,000	94.25
LAUREL	681,000	17.47	852,000	21.86
LAWRENCE	994,000	70.39	545,000	38.60
LEE	1,171,000	151.02	164,000	21.15
LESLIE	1,394,000	93.67	500,000	33.60
LETCHER	1,943,000	63.32	470,000	15.32
McCREARY	1,249,000	79.89	243,000	15.54
MAGOFFIN	1,826,000	135.11	278,000	20.57
MARTIN	1,988,000	142.76	703,000	50.48
MORGAN	874,000	72.21	272,000	22.47
MUHLENBERG	2,574,000	79.84	969,000	30.06
OHIO	1,608,000	73.88	3,668,000	168.53
PERRY	2,014,000	59.65	789,000	23.37
PIKE	4,321,000	53.26	2,486,000	30.64
UNION	2,107,000	118.23	688,000	38.61
WEBSTER	1,387,000	93.51	592,000	39.91
WHITLEY	1,686,000	50.49	732,000	21.92

COAL COUNTY SEVERANCE TAX INFORMATION

COUNTIES	SEVERANCE TAX GENERATED	LGEA COUNTY RECEIVED	LGEA COUNTY RECEIVED AS PERCENT OF SEVERANCE TAX GENERATED	LGEA COUNTY RECEIVED AS PERCENT OF TOTAL REVENUE	PERCENT OF LGEA FUNDS SPENT ON ROADS
BELL	8,542,184	568,673	0.07	0.26	0.12
BREATHITT	8,717,164	592,920	0.07	0.25	0.87
BUTLER	2,331,575	215,112	0.09	0.15	100.00
CLAY	2,686,192	310,141	0.12	0.06	0.69
ELLIOTT	1,091,014	216,372	0.20	0.19	0.43
FLOYD	9,467,223	738,410	0.08	0.25	0.74
HARLAN	18,115,176	852,727	0.05	0.14	0.32
HOPKINS	11,404,238	847,256	0.07	0.19	0.00
JOHNSON	2,595,373	382,079	0.15	0.08	0.98
KNOTT	10,334,625	676,005	0.07	0.32	N/A
KNOX	2,049,119	236,940	~~0.12~~	~~0.05~~	~~0.31~~
LAUREL	3,024,278	293,794	~~0.10~~	0.17	0.53
LAWRENCE	886,871	335,777	0.38	0.19	0.46
LEE	75,029	380,480	5.07	0.25	0.27
LESLIE	8,715,266	748,984	0.09	0.35	0.65
LETCHER	9,933,289	787,621	0.08	0.29	0.56
McCREARY	1,235,533	163,887	0.13	0.10	0.25
MAGOFFIN	4,746,797	432,742	0.09	0.18	0.59
MARTIN	22,468,219	1,170,244	0.05	0.40	0.82
MORGAN	406,574	108,164	0.27	0.08	100.00
MUHLENBERG	11,712,184	991,224	0.08	0.26	0.81
OHIO	8,612,375	696,120	0.08	0.13	0.09
PERRY	11,865,520	898,145	0.08	0.29	0.64
PIKE	43,476,855	2,641,408	0.06	0.34	0.52
UNION	14,053,477	1,098,488	0.08	0.36	0.87
WEBSTER	6,257,090	593,650	0.09	0.28	0.46
WHITLEY	3,737,121	299,531	0.08	0.11	0.71

COAL COUNTY SCHOOL REVENUE INFORMATION

COUNTIES	SCHOOL LOCAL REVENUE ROUNDED TO 000	SCHOOL LOCAL REVENUE % OF TOTAL	SCHOOL STATE REVENUE ROUNDED TO 000	SCHOOL STATE REVENUE % OF TOTAL	SCHOOL FEDERAL REVENUE ROUNDED TO 000	SCHOOL FEDERAL REVENUE % OF TOTAL
BELL	1042	8	8810	70	2695	22
BREATHITT	666	10	4429	65	1754	26
BUTLER	349	10	2705	76	509	14
CLAY	194	2	6072	68	2605	29
ELLIOTT	119	5	1785	71	594	24
FLOYD	687	5	10460	77	2376	18
HARLAN	1283	9	10201	71	2925	20
HOPKINS	3130	20	10314	68	1766	12
JOHNSON	1032	12	5996	69	1660	19
KNOTT	216	3	4537	69	1846	28
KNOX	507	5	6782	69	2561	26
LAUREL	911	7	9245	73	2528	20
LAWRENCE	291	6	3575	74	996	20
LEE	245	9	1815	69	572	22
LESLIE	255	5	3743	68	1473	27
LETCHER	910	9	7077	73	1792	18
McCREARY	217	3	4525	72	1522	24
MAGOFFIN	127	3	3596	77	933	20
MARTIN	632	12	3473	68	1026	20
MORGAN	162	4	3255	76	868	20
MUHLENBERG	982	9	7229	65	2915	26
OHIO	775	12	5024	77	713	11
PERRY	999	8	8325	72	2284	20
PIKE	3908	14	18924	67	5297	19
UNION	1713	30	3500	62	435	8
WEBSTER	837	17	3563	72	539	11
WHITLEY	889	8	7976	74	1923	18

D R A F T

COAL PRODUCTION, EMPLOYMENT, & PRODUCTIVITY

Preliminary Figures

(To Be Revised)

Production and Employment Projections, 1990 - 1995
Kentucky, Eastern and Western Kentucky, United States

PRODUCERS	1990 DOE PROJECTED PRODUCTION	1990 PROJECTED EMPLOYMENT	1995 DOE PROJECTED PRODUCTION	1995 PROJECTED EMPLOYMENT
Kentucky				
Total	175,665,000	37,816	197,860,000	35,220
Deep	112,755,000	27,203	129,830,000	25,638
Strip	62,911,000	10,613	68,031,000	9,583
Eastern Ky.				
Total	125,949,000	28,905	143,161,000	26,932
Deep	79,179,000	20,429	88,855,000	18,843
Strip	46,771,000	8,475	54,306,000	8,088
Western Ky				
Total	49,716,000	8,911	54,699,000	8,288
Deep	33,576,000	6,773	40,975,000	6,794
Strip	16,140,000	2,138	13,725,000	1,494
Totals for U.S.				
Total	1,056,767,000	182,728	1,221,477,000	173,633
Deep	479,753,000	131,288	577,216,000	128,601
Strip	573,968,000	51,440	638,950,000	45,032

Kentucky Coal Industry Productivity, 1975 - 84
(Production per Miner per Hour, in Short Tons)

	Eastern Kentucky			Western Kentucky			Kentucky Total		
Year	Underground Productivity	Surface Productivity	Total Productivity	Underground Productivity	Surface Productivity	Total Productivity	Underground Productivity	Surface Productivity	Total Productivity
1975	1.40	2.39	1.80	1.81	3.09	2.58	1.53	2.63	2.04
1976	1.40	2.47	1.84	1.85	3.98	2.62	1.54	2.87	2.05
1977	1.28	2.23	1.71	1.57	3.31	2.22	1.38	2.51	1.85
1978	1.23	2.14	1.62	1.46	2.78	1.97	1.29	2.39	1.70
1979	1.22	2.19	1.55	1.39	2.92	1.94	1.26	2.38	1.64
1980	1.39	2.18	1.68	1.49	2.76	1.96	1.41	2.33	1.75
1981	1.46	2.26	1.76	1.52	3.10	2.12	1.47	2.45	1.84
1982	1.48	2.34	1.79	1.60	2.62	2.03	1.51	2.41	1.84
1983	1.75	2.31	1.98	2.04	2.92	2.45	1.81	2.47	2.09
1984*	1.82	2.40	2.06	2.12	3.04	2.60	1.87	2.54	2.14

* MACED Caluclation based upon DOE preliminary Estimates for 1984

Kentucky Coal Prouduction and Employment, 1975-84

Year	Underground Production	Underground Average Daily Employment	Surface Production	Surface Average Daily Employment		Total Production	Total Average Daily Employment
1975	65,632,000	22,200	77,981,000	13,870		143,613,000	36,070
1976	64,432,000	24,153	79,500,000	15,070		143,932,000	39,223
1977	61,672,000	28,112	84,590,000	17,377	%	146,262,000	45,489
1978	59,485,000	29,951	76,204,000	21,671		135,689,000	51,622
1979	73,361,915	30,009	73,185,887	17,181		146,547,802	47,190
1980	74,953,726	30,581	71,032,566	15,814		145,986,292	46,395
1981	77,204,030	30,521	77,555,599	17,529		154,759,629	48,050
1982	74,783,880	28,421	73,146,160	16,439		147,930,040	44,860
1983	64,825,916	22,533	63,867,857	13,900		128,693,773	36,433
1984*	83,129,745	25,835	81,483,255	17,274		164,613,000	43,110

* DOE Preliminary Estimates for 1984

Eastern Kentucky Coal Prouduction and Employment, 1975-84

Year	Underground		Surface		Total	
	Production	Average Daily Employment	Production	Average Daily Employment	Production	Average Daily Employment
1975	40,628,000	15,500	46,628,000	9,950	87,257,000	25,450
1976	40,511,000	17,883	50,587,000	11,598	91,098,000	29,481
1977	38,296,000	19,743	55,661,000	13,048	93,957,000	32,791
1978	41,625,000	22,996	54,608,000	16,706	96,233,000	39,702
1979	54,129,728	23,064	49,949,266	12,838	104,078,994	35,902
1980	55,678,205	22,702	49,884,913	11,819	105,563,118	34,521
1981	59,620,680	24,032	55,792,282	13,473	115,412,962	37,505
1982	57,069,246	22,782	51,960,507	12,319	109,029,753	35,101
1983	49,009,252	17,615	44,190,025	10,485	93,199,277	28,100
1984*	64,817,550	21,161	58,644,450	13,446	123,462,000	34,607

* DOE Preliminary Estimates for 1984

Western Kentucky Coal Prouduction and Employment, 1975-84

Year	Underground		Surface		Total	
	Production	Average Daily Employment	Production	Average Daily Employment	Production	Average Daily Employment
1975	25,004,000	6,700	31,353,000	3,920	56,357,000	10,620
1976	23,921,000	6,270	28,913,000	3,472	52,834,000	10,012
1977	23,376,000	8,369	28,929,000	4,329	52,305,000	12,698
1978	17,860,000	6,955	21,596,000	4,965	39,456,000	11,920
1979	19,232,187	6,945	23,236,621	4,343	42,468,808	11,288
1980	19,275,521	7,879	21,147,653	3,995	40,423,174	11,874
1981	17,583,350	6,489	21,763,317	4,06	39,346,667	10,545
1982	17,714,634	5,639	21,185,653	4,120	38,900,287	9,759
1983	15,816,664	4,918	19,677,832	3,415	35,494,496	8,333
1984*	18,312,195	4,674	22,838,805	3,828	41,151,000	8,502

* DOE Preliminary Estimates for 1984

United States Coal Prouduction and Employment, 1975-84

Year	Underground		Surface		Total	
	Production	Average Daily Employment	Production	Average Daily Employment	Production	Average Daily Employment
1975	292,879,000	134,710	355,172,000	55,130	648,053,000	189,840
1976	294,834,000	139,960	383,619,000	61,655	678,453,000	201,915
1977	265,949,000	151,513	425,731,000	69,822	691,127,000	221,317
1978	242,151,000	159,747	422,837,000	82,490	664,988,000	242,237
1979	316,069,251	151,454	456,568,660	72,824	773,455,911	223,747
1980	329,073,191	150,685	490,642,575	77,884	819,715,766	228,569
1981	311,074,196	151,795	499,245,405	77,507	810,319,601	229,302
1982	336,647,168	141,239	491,663,359	75,878	828,310,527	217,117
1983	298,018,513	111,888	474,682,044	63,721	772,700,557	175,609
1984*	340,059,462	117,612	549,959,538	71,958	890,019,000	189,569

* DOE Preliminary Estimates for 1984

United States Coal Industry Productivity, 1975 - 84
(Production per Miner per Hour, in Short Tons)

Year	Underground Productivity	Surface Productivity	Total Productivity
1975	1.19	3.20	1.83
1976	1.14	3.26	1.80
1977	1.08	3.17	1.82
1978	1.04	3.04	1.79
1979	1.06	2.76	1.75
1980	1.04	2.93	1.86
1981	1.29	3.50	2.11
1982	1.37	3.49	2.13
1983	1.62	3.88	2.51
1984*	1.71	4.00	2.59

* MACED Caluclation based upon DOE preliminary Estimates for 1984

SCENARIO I: DOE PRODUCTION FORECASTS

PRODUCERS	1990 DOE PROJECTED PRODUCTION	1990 PROJECTED EMPLOYMENT	1995 DOE PROJECTED PRODUCTION	1995 PROJECTED EMPLOYMENT
Kentucky				
Total	175,665,000	37,816	197,860,000	35,220
Deep	112,755,000	27,203	129,830,000	25,638
Strip	62,911,000	10,613	68,031,000	9,583
Eastern Ky.				
Total	125,949,000	28,905	143,161,000	26,932
Deep	79,179,000	20,429	88,855,000	18,843
Strip	46,771,000	8,475	54,306,000	8,088

Occupational Tax

Advantages and Disadvantages of the Occupational Tax as a Revenue Source in Kentucky Coal Counties

Prepared by:

Ramona Combs
Research Assistant
MACED

Occupational Tax

The occupational tax is a means of collecting revenue from those people who work inside the taxing unit. In Kentucky, the tax may be levied on individuals and on businesses on any one of the following bases:

(1) flat rate schedule for individual occupations and businesses
(2) a percentage of wages or earnings of individuals (paid by wage earner)
(3) a percentage of the net profits of businesses.[1]

Presently in Kentucky, 10 counties and 70 municipalities are using the occupational tax. In speaking with representatives of all of the 10 counties and several of the municipalities, I found that all seemed to talk very favorably about the occupational tax. One of the counties in particular (Hancock) said that they were a very poor county until the occupational tax was enacted, but now they are doing very well.

Of course just like everything else, the occupational tax has its cons as well as its pros. Some of them are listed below:

CONS:

* If a county has a population of over 30,000 then that county would have to have a voter referendum to enact the occupational tax. (Eleven of the 27 coal counties would have to have a voter referendum.)

* A study by Michael G. Fullington, Assistant Professor at Arkansas State University, concludes that the occupational tax could possibly have a negative impact on the growth of municipalities (although there is disagreement with this argument).

---

1 Taken from The Tax Climate in Kentucky, 1974; Kentucky Dept. of Commerce.

* Just by being a "tax", it could cause opposition and criticism.

* Average potential cost to employees at a 1% tax rate range from $119.82 a year in Butler County to $249.29 a year in Martin County. (The particular amount depends on the gross income per taxpayer.) A person making minimum wage would pay approximately $58.96 a year (at a 1% tax rate) while a coal miner (with an average wage of $22,310 a year) would pay approximately $223.10 a year.[2] If a county is comprised of mostly low wage workers, then the tax might be considered unfair.

PROS:

* It can be a major source of revenue for coal counties, ranging from $51,740 a year in Elliot County to $3,971,610 a year in Pike County, based on a 1% tax rate. (This is especially important in Kentucky because of the cap on property taxes and the cut in revenue-sharing.)

* It can be used to pay for specific projects such as: new courthouses, annexes to buildings, administration buildings, etc., then can be taken off when the project is paid for or left on to use for something else. (An example of this is Rowan County, who passed an "occupational and profit" tax in 1981 at 1/4 of 1% to pay for the indebtedness of a new courthouse. They are going to take the tax off when the courthouse is paid for.)

---

[2] This figure derived from data in Kentucky Economic Statistics, 1984.

* It can tax workers living outside the county. (Many of the counties and cities using the occupational tax, tax nonresidents at a lower rate.)

* It can be used to help ensure county services such as police, fire, and ambulance.

* If the population of the county is under 30,000, then a voter referendum is not needed in order to enact the occupational tax.

* The occupational tax is usually easy to administer (providing that the county exempts occupations like domestics, field workers, and other workers who can easily hide their incomes).

* It responds well to fluctuations in the economy (which can be an asset in periods of high inflation).

* It is politically easier to enact the occupational tax than it would be to enact another type of tax.[3]

---

[3] The last three "pros" taken from "Occupational Taxes and the Growth of Municipalities," by Michael G. Fullington, Managing Local Government, March 1984, p.1.

Counties in Kentucky that Use the Occupational Tax

County	Population	Average Gross Income per Taxpayer	Total Covered Wages	Revenue from Occ. Tax	Date Enacted	Purpose
Boone	50,033	$17,749	$259,679,000	$3-4,000,000	1978	More revenue
Boyle	26,120	14,453	136,925,000	450,000	1975	Renovate courthouse
Campbell	82,634	15,625	208,497,000	?	1978	Transit and mental health
Fayette	213,084	17,487	1,575,916,000			Data not available yet
Hancock	7,940	17,431	98,271,000	1,100,000	1973	More revenue
Jefferson	687,886	17,161	4,912,008,000	133,000,000	1962	Operating expenses
Kenton	140,129	16,125	380,425,000	2,200,000	1980	More revenue
Marshall	27,239	14,390	128,184,000	700,000	1981	New roads and road repair
Rowan	19,361	12,925	61,964,000	160,000	1981	New courthouse
Woodford	18,757	16,399	80,866,000	1,000,000 +	1972	New courthouse

COAL COUNTIES

County		Population	Total Covered Wages	Potential Occ. Tax Revenue (1%)	Severence Tax Revenue	Property Tax Revenue
Bell	*	35,395	$144,331,000	$1,443,310	$568,673	$1,729,000
Breathitt		17,832	63,123,000	631,230	592,920	793,000
Butler		11,500	20,095,000	200,950	215,112	562,000
Clay		23,936	82,750,000	827,500	310,141	475,000
Elliot		7,293	5,174,000	51,740	216,372	270,000
Floyd	*	52,687	168,366,000	1,683,660	738,410	1,707,000
Harlan	*	43,441	181,219,000	1,812,190	852,727	1,940,000
Hopkins	*	48,760	257,015,000	2,570,150	847,256	5,235,000
Johnson		26,663	85,915,000	859,150	382,079	1,630,000
Knott		18,977	45,293,000	452,930	676,005	617,000
Knox	*	32,173	56,344,000	563,440	236,940	932,000
Laurel	*	42,568	154,687,000	1,546,870	293,794	1,467,000
Lawrence		15,222	23,869,000	238,690	335,777	853,000
Lee		8,060	13,128,000	131,280	380,480	650,000
Leslie		15,860	23,139,000	231,390	748,984	503,000
Letcher	*	32,965	73,996,000	739,960	787,621	1,437,000
McCreary		16,586	24,449,000	244,490	163,887	546,000
Magoffin		14,372	33,359,000	333,590	432,742	514,000
Martin		15,372	121,088,000	1,210,880	1,170,244	694,000
Morgan		12,730	27,205,000	272,050	108,164	449,000
Muhlenberg	*	33,599	133,430,000	1,334,300	991,224	2,176,000
Ohio		22,766	79,547,000	795,470	696,120	1,156,000
Perry	*	36,052	168,622,000	1,686,220	898,145	1,738,000
Pike	*	87,563	397,161,000	3,971,610	2,641,408	4,157,000
Union		18,284	150,950,000	1,509,500	1,098,488	1,933,000
Webster		15,387	58,560,000	585,600	593,650	1,198,000
Whitley	*	36,000	105,402,000	1,054,020	299,531	1,659,000

*Counties that would need voter referendum to enact occupational tax