The original documents are located in Box 44, folder "White House Conference on Domestic and Economic Affairs - 10/7/75, Knoxville, TN (1)" of the John Marsh Files at the Gerald R. Ford Presidential Library.

OCT 4 1975

THE WHITE HOUSE

WASHINGTON

October 1, 1975

MEMORANDUM FOR THE PRESIDENT

VIA: JOHN O. MARSH, JR.

FROM: WILLIAM J. BAROODY, JR.

SUBJECT: Briefing Paper on the Mid-Appalachia White House Conference, October 7, 1975

Enclosed is the issues briefing paper to prepare you for the question and answer session in Knoxville on Tuesday.

BACKGROUND PAPER

FOR MID-APPALACHIA WHITE HOUSE CONFERENCE

ON DOMESTIC AND ECONOMIC AFFAIRS

October 7, 1975

Knoxville, Tennessee

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The Appalachian Region

ISSUES IDENTIFIED BY CO-SPONSORING ORGANIZATIONS

An informal discussion was held with each of the co-sponsoring organizations to identify the major issues of importance to the organizations and delegates attending the conference. Below is a summary of the issues identified.

AFL-CIO Appalachian Council represents all organized labor within the 13 Appalachian states. Its major goal is finding jobs for the unemployed. Funded by the Department of Labor to conduct job corps recruiting and training programs, the Council trained approximately 1,600 people last year. Issues identified were:

1. high unemployment and general state of the economy
2. environmental problems that result from strip mining
3. high price of energy which discourages the location of new industries

American Public Health Association was founded in 1872 to protect and promote personal and environmental health and to develop a national policy for health care. Membership (24,000) includes virtually every sector of the health profession. Issues identified were:

1. quantity and quality of medical services in rural areas
2. lack of medical manpower and the problems of recruitment for rural areas
3. need for better housing and sanitation
4. concern over a national health insurance program

American Public Works Association—Mid-Appalachia Chapters is organized for public works employees to promote better techniques and methods in the public works area. Most members (2,500) are directors of public works. Issues identified were:

1. environmental issues, particularly those related to the coal mining industry (use of heavy trucks which tear up roads, effects of strip mining and water pollution)
2. unemployment

Commission on Religion in Appalachia is composed of representatives of 18 Christian denominations to develop support for serving the needs of people living in Appalachia. Issues identifed were:

1. the plight of poor people and the unemployed
2. the effects of strip mining on the environment
3. black lung disease
4. housing for poor people

Commission on the Status of Women—Mid Appalachia Offices is a 12-member state commission organized to study the status of women and to make recommendations to the state legislatures. Issues identified were:

1. financial aid to education with particular emphasis on equal pay for women doing the same work as men
2. the environment, particularly the need to balance environmental needs with the need for additional energy
3. the need for a federal health care program

The Grange--Mid-Appalachia is a family oriented farm organization with roots in rural communities. Issues identifed were:

1. the domestic and world food policy, commodity food programs, types of food support programs, world trade and world hunger
2. improving overall transportation in Appalachia
3. the high cost of energy
4. improving the supply of doctors and health clinics in rural areas
5. improving social services for people in rural areas
6. the need to provide a school lunch program in all schools

Knoxville Chamber of Commerce is primarily concerned with the economic development of the Knoxville area. Issues identified were:

1. the overall Mid-Appalachia employment situation, particularly in the Knoxville area
2. zoning and land use development in the Knoxville area, as well as urban development
3. creation of effective job training programs especially in construction and other skilled labor industries

Knoxville National Association for the Advancement of Colored People attempts to bring better opportunities to Blacks and better schooling in the Knoxville area for all poor people, regardless of race. Issues identified were:

1. housing and jobs for minority people
2. better education for minority people
3. basic services for minority people

Mid-Appalachia Chambers of Commerce are comprised of six state chapters dedicated to advancing their states' economic and social development. Issues identified were: inflation; jobs; energy; and individual economic security, including health care, workmen compensation, unemployment insurance compensation

National Association of Manufacturers--Southeastern Region primarily obtains legislative benefits for business. Issues identified were:

1. energy supply, especially the deregulation of natural gas and its allocation
2. inflation and the state of the economy in general
3. the need to balance economic development with environmental concerns

National Coal Association—Mid-Appalachia represents coal producers and the coal industry in general. Issues identified were:

1. coal production and the use of coal with high sulfur content
2. concern over the environment
3. the need to recognize the necessity of strip mining to fully develop the coal supplies in the Appalachian Region

Sierra Club—Appalachian Regional Conservation Committee is concerned with a wide variety of environmental and conservation issues. Issues identified were:

1. the need for a national transportation policy, with strong emphasis on Appalachia to encourage more industry
2. the need to balance energy production with environmental protection

Southern Growth Policies Board is a public interstate agency governed and supported by 13 state governments in the Appalachian area to help members cope with change. The board reports annually to state legislatures in each of the thirteen states and to the yearly Southern Governors Conference. Issues identified were:

1. health, education and welfare, with special emphasis on health care, public assistance programs and food stamps
2. employment and the economy, especially in Mid-Appalachian areas hard hit by unemployment
3. environmental problems such as the despoiling of mountain areas, strip mining and its assorted erosion, sedimentation and drainage problems, flood control regulation and water resources development
4. reversing the outflow of people from Appalachia
5. the critical natural gas shortage

Southern Regional Education Board is an association which is classified as the first interstate compact for higher education in the United States. Created in 1948 at the direction of the Southern Governors Council, each of the 14 member states has five members on the board. Its goals are to work with representatives of higher education and state governments, to advance post secondary education and, thereby, influence social and economic life. Issues identified were:

1. financial aid to enable more people to go to college
2. the need for more doctors and lawyers in Appalachia
3. need to attract more industry

Tennessee Farm Bureau Federation affiliated with the American Farm Bureau Federation which has the largest organization of farmers in the United States (2,300,000 members). The Tennessee Farm Bureau has 145,000 family members. Issues identified were:

1. concern over America's agricultural export policy favoring the sale of farm products to Russia
2. concern over inflation and the high cost of production of farm goods
3. the banning by the Environmental Protection Agency of certain chemicals that should continue to be used for the production of specific agricultural products

Tennessee Press Association is a trade association of newspapers and publishers, representing all of Tennessee's 149 newspapers. Issues identified were:

1. the state of the economy in general
2. concern for the future growth of industry in the Appalachian Region
3. balancing coal production and strip mining with legitimate environmental concerns

Tennessee River Valley Association fosters and promotes economic growth and development in the Tennessee Valley and surrounding seven-state region. Issues identified were:

1. energy (the major concern), especially the increasing cost of electricity and its effect on attracting new industry
2. relationship between the economy and the ecology
3. unemployment and job opportunities
4. further development of the waterways, rail and highway systems

United Mine Workers of America Health and Retirement Funds is an association formed to provide pensions, health care and medical care to its 700,000 members. The costs of these various programs are financed by coal companies. Issues identified were:

1. rural health care—there is a maldistribution of medical doctors in the rural areas of Appalachia which calls for the federal government

to take the lead in developing programs and provide the incentive to attract more doctors
2. improved housing for the elderly and poor

<u>University of Tennessee</u> is a state land grant university of 38,000 students on five campuses. Issues identified were:

1. access to services such as health care in rural areas
2. general quality and quantity of health care
3. unemployment in rural areas
4. developing means of extracting coal without destroying the environment

INTRODUCTION

The Mid-Appalachia White House Conference on Domestic and Economic Affairs will focus on six states: Kentucky, North Carolina, South Carolina, Tennessee, Virginia and West Virginia. These states share problems that are common to the rest of the country -- inflation, varying degrees of unemployment and human service needs. However, the entire state of West Virginia and portions of the other five states share some very particular problems that a decade ago led to the definition by law (Appalachian Regional Development Act of 1965) of the Appalachian Region.

When identifying the Appalachian Region, which takes its name from the mountains that form its backbone, the Congress ignored state boundaries and designated the Region on the basis of common problems, needs and potentials, all of which were directly influenced by the rugged mountainous terrain. The Region's distinctive mountain heritage also figured into the delineation of the area. As a result of this approach, the Appalachian Region includes only one entire state -- West Virginia -- and parts of New York, Pennsylvania, Maryland, Virginia, Ohio, Kentucky, Tennessee, North Carolina, South Carolina, Alabama, Georgia and Mississippi. (New York was added to the original 11 states pursuant to a provision for its invitation in the Appalachian Regional Development Act of 1965. Mississippi was added to the Region by the 1967 amendment.)

For the purposes of this paper, the term "Mid-Appalachia" refers to the Appalachian portions of the six states and the terms "Appalachia" or the "Region" to the 13-state area as designated by the Appalachian Regional Development Act.

MID-APPALACHIAN ECONOMIC TRENDS

Mid-Appalachia has an estimated population of 6.9 million -- a gain of over 6 percent since 1970, or a growth rate about one-third faster than the nation's. All state areas gained, ranging from 3 percent in West Virginia to 11 percent in South Carolina. Net in-migration is estimated at about 190,000 in the last five years -- a sharp turnaround from the past experience. Mid-Appalachian residents are much more rural (63 percent) than the nation (26 percent) and typically live in small communities or dispersed settlements.

Income and Poverty

In 1970, 1.5 million persons in Mid-Appalachia -- nearly one-fourth of the total population -- were below the poverty level. This was 72 percent higher than the nation's average (14 percent of population). However, the poverty incidence in Mid-Appalachia has dropped from nearly 41 percent in 1960.

In 1965, average per capita income in the Mid-Appalachian state areas totaled $1,930 or only 69 percent of the U.S. average. Per capita income in Mid-Appalachia increased from 1965 to 1973 by 98 percent to a level of $3,810 per person.

Local governments in Mid-Appalachia had $1.9 billion of general revenues available in Fiscal Year 1972 -- an average of $284 per capita. This was far below the U.S. average ($510) or the average for the balance of the Region ($375). In addition, Mid-Appalachian localities were heavily dependent upon intergovernmental aid:

44 percent of their general revenues came from the respective states, and 5 percent from direct federal aid; only 51 percent was locally raised. Of the six states involved, five were among the lowest ten states nationally in estimated fiscal capacity, based on an Advisory Commission on Intergovernmental Relations study.

Employment

Between 1965 and 1972 (latest year for which comparable data are available), employment in Mid-Appalachia increased by approximately 337,000 jobs at a period rate of 16 percent. This was slightly more rapid than the average national increase of 15 percent.

This growth was not, however, evenly distributed throughout Mid-Appalachia. The majority (74 percent) of expansion in jobs took place in the Appalachian state areas of North Carolina, South Carolina and Tennessee, and was concentrated in diverse types of manufacturing, services and the trade industries. The relatively strong growth in this area can be attributed to a wide variety of factors, including its accessibility to major expanding market areas in the Southern Crescent, an increasingly skilled and relatively low wage labor supply, and the general availability of a wide variety of industrial resources. In addition, an initially heavy concentration of manufacturing in the textiles and apparel industry has stimulated growth in a wide variety of related industries (e.g., textile machinery) which has, in turn, led to expansion in still other types of industry, including a variety of capital and consumer goods.

The economy of Appalachian Kentucky, Virginia and West Virginia differs markedly from that of the above state areas in that it is characterized by a smaller concentration of manufacturing and a greater concentration of and dependence upon the coal mining industry. Given current trends in the demand for energy and coal, it is reasonable to anticipate that coal production and employment will continue to expand and will remain a primary influence on large portions of these three state areas in the future.

The net result of the above changes over the 1965-1972 period was an increase in total employment of 17 percent in Appalachian Kentucky, 8 percent in Appalachian Virginia and 7 percent in Appalachian West Virginia.

Agriculture

Appalachian agriculture, consisting largely of intensive cultivation of steep slopes and narrow valleys, has nearly always been at a disadvantage when compared to the more level, richer soil areas of the nation. Not only is there a shortage of cropland, but the rugged terrain results in small fields that make efficient use of modern machinery very difficult. The short growing season, the preemption of scarce level land by towns and rural settlements and the loss of topsoil through flash flooding and erosion of cutover hillsides are other important factors which have resulted in a continuing decline in the Region's agricultural economy. Efforts are being made to increase the acres per farm and particularly the acres in intensive crops such as tobacco and vegetables. Farmers also have converted much of the more rolling land into improved pastures, increasing the emphasis on and the income from livestock production.

But most Appalachian farms remain small, undersized operations yielding low incomes to their owners.

Probable Impact of Recent Recession

The recent recession conditions have had a severe impact on the Mid-Appalachian areas of North Carolina, South Carolina and Tennessee. Industrial activity in these areas is heavily concentrated in the production of textiles and apparel, on which inflation and the recent decline in economic activity and consumer spending had great impact. In addition, this area contains a significant concentration of firms producing capital and intermediate industrial goods, both of which tend to be highly responsive to shifts in national economic trends. Similarly, large portions of central and northern West Virginia which are characterized by a heavy concentration of capital and intermediate industrial goods production have also probably been severely affected by the recent economic downturn.

In contrast, the coal fields of Mid-Appalachian Kentucky, Virginia and West Virginia are likely to have been less affected by the recession due to the impact of the continuing energy crisis and resulting improvement in the market for Appalachian coal.

I S S U E S

ENERGY AND THE ENVIRONMENT

Introduction

Appalachia has always had vast energy deposits. For example, at the turn of the century, Appalachian fuels supplied almost 90 percent of the nation's power. But during the 1950s and 1960s numerous technological changes and simultaneous exploitation of new energy sources caused output from the area's extractive industries, especially coal mines, to decline significantly. By 1971, Appalachian fuels -- coal, petroleum, natural gas and hydropower -- furnished only about 16 percent of the United States' domestic fuel energy supply.

Appalachia is well situated to play again a major energy role for the nation. It possesses roughly 27 percent of coal reserves in the U.S. and 12 percent of all known low sulfur (i.e., less than 1 percent sulfur content) coal. More importantly, the reserves are close to the largely fossil-fueled electricity plants and steel complexes of the populous and industrialized East.

Four of the Mid-Appalachian states -- Kentucky, Tennessee, Virginia and West Virginia -- have almost 54 percent of the Appalachian Region's coal reserves. Ninety-two percent of the Region's low sulfur coal reserves are located in these four states.

Out of its estimated 57 billion tons of coal reserves, Mid-Appalachia currently produces about 232 million tons annually -- nearly 40 percent of U.S. coal production. Coal production in Mid-Appalachia has remained virtually constant for the past seven years.

By 1985, this output is expected to double if: there is a strong national pro-coal policy that involves the mandatory use of coal instead of oil; oil costs continue to remain high; transportation is available; labor conditions are satisfactory; and problems regarding the Clean Air Act are resolved.

It is appropriate that the first Energy Symposium to be sponsored by the White House and a major university, in conjunction with leading government energy agencies and involving the private sector, will be held in the center of a region that may figure prominently in the nation's energy future.

Within a 20-mile radius of Knoxville, a number of institutions -- mostly federal, but some private -- have combined to form an "Energy Opportunities Consortium" for the purpose of involving private investment in cooperative government-private research and demonstration. The members, and their capabilities, are:

- ERDA's Oak Ridge Operations, which include Oak Ridge National Laboratory, Oak Ridge Associated Universities (ORAU) and ORAU's Institute on Energy Analysis;

- TVA, with energy-related research in fertilizers, coal combustion, flue gas desulfurization, power plant siting, etc;
- University of Tennessee, coal burning MHD energy conversion and other energy research;
- Union Carbide, long-time Oak Ridge contractor;
- The Knoxville and Oak Ridge Chambers of Commerce;
- The state of Tennessee.

Members of the Consortium offer a means for use of facilities for research and demonstration in fossil energy, solar and geothermal systems, conservation, nuclear energy, system analysis and system management.

The Natural Gas Shortage

Although no absolute statement can be made about the expected natural gas shortage this winter, several things are clear. The shortage in the Mid-Appalachian states could be 1 1/2 to 2 times higher than the expected national experience. For example, South Carolina used 63.7 billion cubic feet of gas in 1971. This winter, the state will experience a maximum curtailment in the 50 to 60 percent range.

The problems of natural gas usage and dependence upon this fuel are widely different in each state. One of the key factors is the percent of a state's gas which is consumed in the industrial sector. Four of the six Mid-Appalachian states use over half their gas in the industrial sector.

Under Federal Power Commission (FPC) guidelines, large industrial users are given lowest priority and are curtailed first. In some cases industry uses gas for processing and cannot switch to an alternate fuel. Under FPC guidelines, these firms would be given top priority within the industrial category. However, if shortage is so acute as to eliminate all gas to industrial user jobs, salaries and production will be sacrificed.

This is not the general situation, however. Most industries use gas for space heating, air conditioning and boiler fuel; gas until recently was plentiful and cheap. Major problems do arise nevertheless. Alternative fuels are in most cases double the cost and may not be burned without incurring capital expenses to modify burning systems. These are critical problems reported universally by all states.

The most important effect of the natural gas shortage will be on the price increases passed on to consumers through higher product prices. This may disadvantage Appalachian industries relative to other regions causing the demand for products manufactured in the Region to drop. This could be reflected in a downturn in other industries which rely on primary products such as metals and chemicals. Additionally, loss of jobs and income would have a depressing effect on the service and trade sector.

The FPC guidelines and the nature of interstate pipelines preclude savings in the residential sector to supply the industrial users. Regulations currently allow all residential/commercial customers top priority regardless of state boundaries. This reality precludes states heavily dependent on industrial gas from managing the states' allotted natural gas and is an issue between Southern Appalachia and Northern Appalachia.

<u>Black Lung</u>

Congressional reforms are presently being sought in the black lung benefits program by the United Mine Workers (UMW). The miners support H.R. 3333, sponsored by Rep. Carl Perkins of Kentucky.

One effect of the bill would be to place responsibility for payments on the coal industry as well as the U.S. Treasury. Strip mine operators vigorously oppose the measure pointing out that black lung cases are not an occupational health problem in surface mining.

The UMW is seeking legislation to expedite the process for making claims and increase the approval rate for benefits. Since the beginning of the program in 1969, about 360,000 miners nationwide and their widows have received black lung benefits. This amounts to approximately 60 percent of the claims filed.

The following figures for the Mid-Appalachian states are from HEW's 5th annual report on black lung benefits paid through December 31, 1974:

	Filed	Processed	Allowed	Denied
West Virginia	101,651	101,583	59,903	41,680
North Carolina	1,586	1,585	955	630
South Carolina	267	267	183	84
Tennessee	16,371	16,360	9,810	6,550
Kentucky	60,332	60,294	32,847	27,447
Virginia	29,150	29,132	16,221	12,911

The major reasons for the recent backlog, according to the UMW, is that claims are supposed to be paid by the last employer of the claimant. The Labor Department has been unable to locate the employer 50 percent of the time and 97 percent of the awards have been appealed by the operator.

The proposed legislation would establish a fund to pay the benefits. It would be supported by taxes levied on coal operators, thereby eliminating the need to locate the last employer of the claimant. The change would be particularly beneficial to older workers. Under the existing law, operators may be reluctant to hire persons who have worked the mines for years, because the responsibility of contributing to black lung benefits claims may fall to their company.

Finally, the H.R. 3333 would automatically qualify any miner for benefits who has worked in the mines 15 years or more. In addition, the program would be made permanent (the current program expires in 1981).

The National Coal Association (NCA) sees no need for change and argues that the new program should not be a way to place benefit claims against the federal government on the industry. The NCA has urged that the legislation include an industry-administered trust fund and that the program should not take on the character of a welfare or pension program.

Black lung payments to miners and their widows had cost $1 billion by May 1973, and could amount to more than $8 billion by 1980. Adherence to tough standards could eliminate black lung as a social cost factor, and there is impressive evidence that coal dust has been reduced to acceptable levels.

Strip Mining

Strip mining accounts for about one-fourth of all Mid-Appalachian coal mining today, although the percentage varies widely by state -- from 50 percent in Tennessee to 15 percent in West Virginia. It is a highly volatile issue in Mid-Appalachia. From one point of view, operators and miners and coal related businesses fear losing their jobs. From another point of view, many residents of the four-state area are expressing a concern for the devastation of the mountains and the resulting impact on their lives.

In the face of a growing awareness that the United States must depend more on its own fossil fuels, particularly coal, the subject of strip mining raises controversy and problems on many fronts. All are agreed that stripping, for whatever end, must not again despoil Mid-Appalachia. Many feel, however, that modern strip mining technology can leave behind reclaimed lands capable of supporting its original cover.

The Tennessee Valley Authority tries for a middle-ground approach with a three-pronged program of environmental safeguards: (1) recovery of "orphan" lands, carelessly stripped and abandoned years ago; (2) stiff requirements for land restitution for mines who sell coal to TVA; and (3) experimental "long pit" techniques, which have resulted in maximum production, rehabilitation and a cost-plus return to the operator.

Problems along the way to this goal are technical and legal. The geology of the area is difficult. For example, the average medium slope in West Virginia is 14 degrees. In McDowell County, in Southern West Virginia, 90 percent of the area lies on slopes in excess of 20 degrees. The mining of coal on such land is demanding at best and with the required environmental controls, is even more formidable. The understandable desire to preserve the "grandeur of the mountains" and to prevent irresponsible earlier mining practices has led to legislative proposals to sharply curtail, regulate or even abolish surface mining. The Administration position supports realistic and reasonable regulation of the surface mine industry, but the Administration has been unable to agree with Congress on the details of surface mine legislation.

State laws governing strip mining are rigorous on paper, but spotty in enforcement. West Virginia among the six states is noted for the sophistication of its strip mining laws and for their enforcement; other Mid-Appalachian states have not been so vigorous.

Mining Safety

Coal mining continues to lead the list of hazardous occupations. While significant improvements have been made in the industry to control dust, gas and roof operations and maintenance systems, mining deaths nationwide rose for the first six months of 1975. Seventy-six miners were reported killed compared to 67 during the same period last year. Kentucky had the highest rate with 23 coal miner deaths reported in the same period this year compared to 12 last year. Underground mining fatalities rose from 37 to 49 nationwide while surface and auger mining deaths rose from 17 to 19. Mining inspection improvements and education efforts to reduce work-related deaths and injuries must be rigorously pursued to secure a safe working environment. The so-called "risks-of-the-job" are no longer considered acceptable.

Coal Transportation

The movement of Mid-Appalachian coal from the mines to market areas to meet the national energy expectation will require an efficient transportation network. While coal transport in Mid-Appalachia relies on a multi-modal system (rail, highways, waterways), the efficiency and capacity of this network is open to serious question.

The problem is particularly critical in Kentucky where the use of trucks in coal haulage has caused not only sharply increased state highway maintenance costs, but adds to the costs per ton of coal because of higher per mile and transfer costs to some other transportation mode. State officials estimate that 68 percent of mined tonnage is hauled at some point by trucks. Only 6 percent of the coal haulage is solely by truck. Kentucky's state highways are not designed for such heavy usage. The state's roadway maintenance costs have sharply risen in recent years.

Oil

Mid-Appalachia is virtually a total importer of oil, as it is of natural gas. Thus, its oil supply situation depends on the availability of oil in the domestic and overseas markets. Barges on the Tennessee River and pipeline spurs through Atlanta supply the southern part of Mid-Appalachia.

Supply is plentiful. Aside from an embargo, no problems are anticipated in gasoline. Number Two fuel oil could become in short supply if there is an extremely cold winter; if the pressure on natural gas becomes more acute, there will be a corresponding pressure on heating oil. Most industries which were dependent on natural gas for boiler fuel; however, have switched to oil or coal over the past year as a result of being cut off by their natural gas suppliers.

Air Pollution Control Requirements -- Sulfur Standards

The near-term impact of air pollution control requirements, particularly those related to control of sulfur oxide discharges, is a coal related issue that directly affects economic development in the Mid-Appalachian states. While these four states have 92 percent of the Appalachian Region's low sulfur coal deposits, this amount accounts for only one-third of their total coal reserve base. Users of coal, primarily the electric utilities, have shifted to oil and natural gas to comply with air pollution control requirements because current technology on removal of sulfur oxides from stack gases after combustion has not yet reached the point where extensive installation of cleaning equipment is possible.

There are some options to burning naturally low sulfur coal. Coal-fired electric utility plants can use mechanical coal cleaning, even though this process is not totally effective. It will not reduce very high sulfur coals to very low sulfur coals and, in most cases, is not a substitute for stack gas cleaning. However, until highly effective stack gas scrubbing is perfected, efficient coal washing used with the less effective scrubbing stack gas cleaning systems will help alleviate the sulfur emission problem. Industry is pressing for modifications in air quality standards which will permit the burning of high sulfur coal.

TVA has been struggling with the need to comply with strict air quality standards, often with some frustration. (A local issue in the Knoxville area has been TVA's Bull Run generating plant, which installed electrostatic precipitators that successfully eliminated fly ash discharge when burning high sulfur coal but didn't work on low sulfur coal. The result was an obvious increase in fly ash in the area, with more dirt, paint peeling on cars, and cries of health hazards. TVA offered to wash windows and paint cars, thereby lending credibility to the fears of emphysema and other dread respiratory ailments. Development of precipitators to act on low sulfur coal is still in the future; meanwhile, antagonisms around Bull Run simmer.)

Facilities and Services

In coal-producing communities, the economic and community base of industrial sites, roads, schools, water supplies, sewer systems and recreational facilities needed for expansion to meet the coal-boom demands can attract industries that would use available energy and provide the basis for sustained economic activity long after the present boom is past. In other areas, assured and adequate energy supplies can provide a similar long-term benefit for the Region; so can the facilities built to transmit and transport Appalachian energy.

The Appalachian Regional Commission in particular concerns itself with the need to determine how coal can provide the foundation for broad-based development of Appalachia. The ARC puts its case strongly:

"In order to satisfy the nation's energy needs without placing the familiar burden of Appalachia's "boom and bust" heritage on the shoulders of the Region's people, the economic impact of the present energy crisis must be directed to produce a strong, diversified, self-sustaining economy for the Mid-Appalachian states. This must be done in a way that will preserve the area's environment. The current short-term demands for energy, which have already produced both energy supply and demand impacts in the area, must be capitalized on to provide a long-term improvement in the area's future. In coal-producing communities, the economic and community base of industrial sites, roads, schools, water supplies, sewer systems and recreational facilities needed for expansion to meet the coal-boom demands can draw in industries to use available energy and to provide the basis for sustained economic activity long after the present boom is past."

A central issue relating to coal production in the Appalachian Region is how coal can provide the foundation for broad based development. It is hoped that coal resources can be used to foster long-term economic prosperity. Today, coal is used primarily to produce electricity or in metallurgical processes as a coking coal. The resulting economic gains to the coal producing areas are generally in the forms of wages, salaries and taxes derived from the production of coal, generation of electricity and various complimentary activities such as transportation, and the manufacturing of mining equipment. This has not provided the framework for a significant development of industries other than those directly related to coal mining. Thus, when coal declines in importance, the economic vitality of the coal producing areas of the Appalachian Region will be in serious jeopardy. Therefore, the proper mechanism, set of policies or development strategy necessary to yield broad based development from coal production must be formulated.

Electric Power Generation Facilities

In many areas of Mid-Appalachia, sites suitable for residential, commercial and industrial development are limited. Sites for energy facilities, more often than not, will be in competition with other potential uses, because of the limited amount of developable land.

While development of conventional hydroelectric power in Appalachia has reached the stage where most of the better sites are being utilized, potential development sites exist in the six states only if an extensive reservoir construction program were to be undertaken. The Tennessee Valley Authority obtains 16 percent of its power from hydroelectric plants. Future steam power production will depend on meeting air pollution standards.

Oak Ridge will always be synonymous with nuclear energy. Since the wartime Manhattan Project days, this federal facility -- now operated by ERDA -- has evolved into one of the free world's only centers for uranium enrichment, and the center of research into future forms and uses of nuclear fission and fusion. Nuclear energy plants in Mid-Appalachia proceed on the same kind of stretched-out schedule as they do elsewhere in the country. No plants are in operation in Tennessee, Kentucky or West Virginia. South Carolina has four reactors on line, Virginia two and one plant is operating in North Carolina. Taken together, they provide 8.5 percent of the total power generated in the six states. When all the nuclear plants under construction and in the planning stage are completed, they will account for nearly four times as much generated power as nuclear power currently provides in the region.

Electric power generation sites are critical to the optimal expansion of the nation's energy program and state and local officials are well aware of this fact. Site selection and development, however, is a traditional function of local government. Land use decisions have to be made within the context of overall community development. Unfortunately, energy facility sites have been selected in the past with scant attention given to the total development needs of the community.

Special Issues Related to TVA

The Tennessee Valley Authority (TVA) has come under increasing criticism in recent years. Environmentalists have challenged its policies with respect to the use of strip mined coal, while more recently the general public has strongly criticized a series of rate hikes. Also, strong opposition is being expressed in the local and regional press to the President's nominee, James F. Hopper, III, to the TVA Board.

TRANSPORTATION

Introduction

One of the major factors contributing to the economic stagnation of much of the Mid-Appalachian state areas has been its isolation. This isolation results primarily from the difficulties in constructing transportation facilities in the mountain terrain. Because of the difficulties, major routes have bypassed rather than gone through Appalachia. Transportation is the number one priority of the Mid-Appalachian Governors.

Tennessee-Tombigbee Waterway -- An Energy Corridor

The Tennessee-Tombigbee waterway will connect the Tennessee River with the Black Warrior-Tombigbee system from Demopolis to Mobile, linking some 16,000 miles of the inland waterway system to the Southeastern Gulf. Construction of this 253-mile waterway will connect Tennessee and northeastern Mississippi with Gulf Coast ports, without the necessity of routing Tennessee River traffic through Kentucky onto the Ohio and Mississippi Rivers and onto the coast. Twenty-three states will share in navigational benefits.

The project is under construction by the U.S. Army Corps of Engineers and is scheduled for completion in 1981. In the southeast it is estimated that there will be a $2.6 billion increase in industrial growth by 2020. It will have an impact on the economy in Mid-Appalachia. The Tennessee-Tombigbee waterway project is a major public works item and has solid support from the Governors and congressional delegations from the five compact states. The waterway is seen as an "energy corridor" which will help meet the Project Blueprint Independence goals.

Aviation

A particular problem in the Mid-Appalachian states has been a decline in the communities receiving certified air service from either the trunkline or local service air carriers. One potential for filling this void is third-level air carriers. However, the majority of commuter airlines do not have access to sufficient capital to provide new service on unproven routes.

Rail Transportation

In the Mid-Appalachian coal states the rail system is critical to the economy of the entire country during normal times and far more critical during the present energy crisis. While most of these states are blessed with some of the finest railroads in the country (the Norfolk and Western, the Southern and the Chesapeake and Ohio), there are certain critical issues for them which must be resolved. An adequate supply of rail freight cars, particularly coal cars, is vital to meet increased demands for the use of coal. The Interstate Commerce Commission's system of rate structures and regulations is important to all railroads and any changes would have an impact on the production and distribution of energy.

The abandonment of branch lines is a serious matter for all six Mid-Appalachian states, since it has a direct impact on the social and economic conditions of the communitites and industries served. Subsidizing branch lines is a critical issue to state and local governments and to private enterprise, including the railroads.

Highways

The top priority for highway construction is completion of the massive Interstate Highway System. A major problem facing state governments is that this program has been underway for approximately 20 years and budgeting for the cost of maintenance is becoming a severe burden on state revenues because federal funds are not permitted for maintenance. The maintenance problem also exists on the other systems, but the Interstate Highway System maintenance costs are a large, new burden on the Mid-Appalachian states. Opinion is somewhat divided on whether federal funds should be spent on maintenance, with most highway engineers and elected officials insisting that the Interstate System must be completed and other construction needs should be met.

In the Mid-Appalachian states, completing the Appalachian Development Highway System has a very high priority. Because of inflation and escalating construction costs, however, current authorizations are insufficient to complete construction of the entire designated system.

A particular problem facing the states of Tennessee, Kentucky and Virginia concerns Route 25E through the Cumberland Gap National Historic Park. Because of historic and environmental damage that would be caused by usual highway construction on the surface through the Gap, the Congress in Section 160 of P.L. 93-87, the Federal Aid Highway Act of 1973, authorized a tunnel to be constructed under the parkways highway program, which that act for the first time permitted to use highway trust funds. To date the Department of the Interior and the Department of Transportation cannot agree on what is the proper procedure for implementing the authority in Section 160 of P.L. 93-87 and using the limited parkways allocation from the highway trust fund for this particular parkway project.

Another major problem has to do with the distribution of coal. A high percentage of Kentucky, Tennessee, Virginia and West Virginia's coal moves over the highway network for at least part of its distribution. There are many roads being badly worn because they were not designed to support the loads carried by some of the large coal trucks.

Rural Public Mass Transportation

Rural public mass transportation is a national problem, but is more acute in Mid-Appalachia because of the high incidence of poverty and the rough geographic terrain. The problem faced by rural transportation has three basic dimensions:

- Economic -- operations are costly due to the length of travel and are compounded by low family incomes.
- Physical -- there are many physically handicapped people needing special vehicle designs. Most buses are not operationally suited to the grades of rural Appalachian roads and special service needs of many potential riders.

- Service -- many people, particularly the older and handicapped rural poor, do not have access to automobiles and what inter-city bus service exists generally is not oriented to the origins and destinations of rural residents.

There appears to be an interest in rural public mass transportation. Within these six Mid-Appalachian states there were 31 proposals requesting approximately $15.6 million from the Rural Highway Public Transportation Demonstration Program (Section 147, 1973 Federal Aid Highway Act).

HUMAN SERVICES

Health Care

The major issues in the Mid-Appalachian area of Virginia, Tennessee, South Carolina, North Carolina, Kentucky and West Virginia are maldistribution of health and child development resources and lack of access to services. In many rural areas older physicians are dying, retiring, or cutting back on their practices faster than new physicians can be recruited. The same problem extends to many other types of health personnel: dentists, nurses and technicians.

Most of Mid-Appalachia has an adequate supply of hospital beds, but hospital beds alone do not insure a well-rounded areawide health system. To achieve an areawide health system, most of the Mid-Appalachian states have concentrated on helping local communities start primary health care centers. There are now more than 150 in operation. Smaller communities can only sustain a center run by a nurse practitioner who works under the orders and guidance of an outside physician, but Medicare and Medicaid regulations often forbid payment for such services.

Mental Health. Studies of mine workers reveal that over half of their medical problems stem from anxiety. Health -- especially mental health -- will become critically important with the renewed interest in coal.

Emerging National Health Policy. Federal national health policy has been criticized for failing to meet the special conditions of health care in rural areas. Mid-Appalachia has need for a greater emphasis on preventive medicine. Water and sewage systems that provide drinkable water and adequate waste disposal to prevent spread of disease are examples.

Children. Although Mid-Appalachia is still a stronghold of the family unit, many families simply lack the basic education and available resources to provide their children with the best opportunity for healthy, productive lives. Problems affecting children in the Mid-Appalachian area are malnutrition, lack of pre- and post-natal care, limited day care facilities and a high infant mortality rate. All of the Mid-Appalachian states are, however, involved in child development programs that incorporate a multi-disciplinary approach to providing children with health care and educational opportunities in a family setting.

The Mid-Appalachian states are actively utilizing many sources of federal funds, both in matching and supplemental situations. The largest source of matching funds, Title IV-A of the Social Security Act, has served to vastly increase the amount of money available for day care and social services.

There is a belief in Mid-Appalachia that federal guidelines are often inconsistent and too restrictive. For example, some contend that the transportation guidelines for Head Start programs are inconsistent with the transportation guidelines for the Aging Program, which prevents these two programs from making effective and economical use of vehicles and transportation routes.

Presently, there are proposed U.S. Department of Agriculture changes in the nutrition components of Mid-Appalachian child development projects. There is oposition to the changes because it would force many programs to find alternate sources of funds, providing adequate nutrition.

Public Dependency. The six Mid-Appalachian states generally are considered to have a high rate of public dependency due in large part to low income and high unemployment. While national data were not available for comparison at this time, the table on the next page indicates the degree of public dependency in each of the Mid-Appalachian states.

State	Population[1]	Number of Recipients (Individuals, Not Families) Aid for Dependent Children[2]	General or Public Assistance[2]	Food Stamps[3]	Supplemental Security Income[4]	Medicaid[5]
Kentucky	3,376,880	161,993	no data	537,912	no data	340,840
North Carolina	5,405,328	176,792	3,934	576,066	144,520	292,940
South Carolina	2,814,162	137,612	784	407,203	77,390	161,343
Tennessee	4,155,182	207,433	no data	430,988	134,978	216,805
Virginia	4,919,507	176,953	13,905	288,621	72,084	267,459
West Virginia	1,795,642	73,635	11,911	305,640	41,786	140,865

[1] "Mean 1975 Population Estimates", Appalachian Regional Commission (unpublished).

[2] U.S. National Center for Social Statistics. Recipients of Public Assistance Money Payments and Amounts of Such Payments, by Program, State and County, February 1975, Washington, D.C. 1975.

[3] U.S. Department of Agriculture, Program Reporting Staff (unpublished), July 1975.

[4] U.S. Department of Health, Education and Welfare, Office of the Commissioner on Welfare (unpublished), 1975.

[5] U.S. Department of Health, Education and Welfare, Medical Services Administration, Social Rehabilitation Service (unpublished), August 1975.

Education

From an examination of data available on Mid-Appalachia, it is apparent that in most areas the quality of education still does not compare favorably with the rest of the nation. Education needs are particularly evident in the rural areas. While most rural Appalachians pay lower property taxes than the average U.S. taxpayer, they spend a higher percentage of income on public school education. Thus, while Mid-Appalachia strains to provide a good education for its children, it still comes up short.

Inflation and State Support. The Mid-Appalachian states report that local school systems cannot keep pace on a yearly basis with operating school budgets because of rising costs. Transportation costs are soaring; fixed costs such as lighting and heating have doubled and tripled in many localities. Several states have considered cutbacks in state aid to communities. Recently Virginia's governor ordered an across-the-board 5 percent cut in state education aid.

Legislative and Judicial Mandates. In every Mid-Appalachian state, legislatures and courts have recently mandated educational activities without adequate funds to implement such programs. The states of West Virginia, Virginia and Tennessee recently passed legislation mandating that a wider range of school-age children (in some states ages 2-21) be provided a public education. This has placed a tremendous burden on schools in these states with special education services for the handicapped.

Generally speaking, Appalachia is not experiencing serious busing problems. With the exception of Louisville, Kentucky, and Mecklenburg County, North Carolina, the busing situation throughout the six-state area is not critical.

<u>Control of the Schools</u>. Who decides what curricula and textbooks are to be used in the schools is a concern illustrated by the Kanawha County, West Virginia, incident. School boards across the Region have become sensitive to the opinions of the parents and the community. Parents want to be considered when such decisions are being made.

Every state reports a dwindling lack of confidence in the public education systems (teacher strikes, discipline and students' rights). The public is demanding more accountability for the schools and the quality of education being provided.

<u>Textbooks</u>. Two states, West Virginia and Kentucky, do not appropriate sufficient funds to provide textbooks to all public school students. Both states are reevaluating their position.

<u>Vocational-Technical Education</u>. Every state had reaffirmed vocational-technical education as a top education priority. Greater emphasis has been placed on tying curricula to labor market needs. Kentucky has indicated an increased demand for energy-related training due to the resurgence of the coal industry. Several states have embarked on related adult basic literacy programs.

Higher Education -- (Special Situation)

The new East Tennessee State University Medical School, designed to serve veterans' hospitals in East Tennessee and Southwest Virginia, is having accreditation problems. The American Medical Association (AMA) has withheld its letter indicating that this new institution has the potential for possible accreditation. Since federal funds are involved, a federal position statement may be sought.

HOUSING AND COMMUNITY DEVELOPMENT

INTRODUCTION

Economic diversification and balanced rural-urban growth are goals commonly held by Tennessee, Kentucky, Virginia, West Virginia, North Carolina and South Carolina. Currently Mid-Appalachia faces an enormous backlog of housing and community development needs. As the area approaches the take-off stage of economic development, meeting this backlog of needs and providing new public facilities for serving new economic growth and development becomes critically important. The residents of Mid-Appalachia have rising expectations about the quality of governmental services.

Six major issues are pervasive:

- Limited land availability for housing and economic development
- Capital investment requirements
- Perceived urban biases in federal programs
- Unmet problems of the rural elderly and poor
- Sewer and water needs
- Community development needs in areas impacted by energy production

Limited Land Availability

The limited availability of land is critical. Large, level, well-drained sites are at a premium because of the steep terrain in Appalachian areas. In West Virginia, Southwestern Virginia, and Eastern Kentucky, most level sites are in flood-prone areas. In many instances, communities must create land through public works projects -- as in Pikeville, Kentucky -- if economic goals are to be met. Also, the cost of serving sites with basic facilities such as water and sewerage is high because of steep slopes, unstable land conditions (e.g. mine subsidence), underlying rock and the distances which must be covered to extend facilities. In coal-producing areas and areas rich in natural gas, the problem of absentee land ownership, including the foreign control of mineral and sub-surface rights, combines with the problem of high land and site development costs to make land for housing and new industries generally unavailable.

Capital Investment Requirements

There is a relative lack of credit institutions in the states and their Appalachian areas. Serious shortages of housing credit are endemic in rural areas because of relatively low savings levels and the preponderance of small financial lending institutions following conservative lending practices. The result is that families whose incomes are lower than the national average must obtain housing loans at higher interest rates and pay back mortgages having shorter-term maturities. For example, 75-percent to 80-percent loans at 10-percent interest for 15 years are not uncommon. In states with usury laws, such as West Virginia, conventional mortgages are practically nonexistent.

Capital limitations also restrict the rate at which new enterprises can be developed or existing ones expanded in the Region. Capital needs are particularly important for the development and expansion of enterprises engaged in energy production, such as coal mines and atomic power plants.

Perceived Urban Biases in Federal Programs

The Environmental Protection Agency's priorities for sewage facility construction emphasize larger urban areas with the worst pollution problems, thereby making 75 percent grants generally unavailable to rural areas. Smaller communities, which have limited resources, must therefore rely on Farmers Home Administration programs which require at least 50-percent local financing. Water pollution control standards require high levels of sewage treatment, raising costs for constructing and operating sewage plants beyond the financial and technical capabilities of smaller communities. Federal Housing Administration (FHA) design standards for underwriting new housing construction do not take into account the higher costs of construction and site development in Appalachian areas. Programs such as HUD's Title I Community Development Block Grants and Section 8 for housing assume a high level of technical expertise, administrative capacity and resources which generally are nonexistent. The demand for Section 502 loans has been exceptionally heavy and has taxed the resources of FHA to process loan applications.

Sewer and Water

Providing water and sewerage facilities is a paramount community development need identified by the Appalachian states. Central water and sewer systems are needed to accommodate new economic growth and expansion. Likewise, these systems are necessary for pollution abatement, health and fire protection. They are also mandatory for new housing construction and for upgrading the large supply of sound rural housing units which lack plumbing. In the Appalachian areas of the six states, existing needs are estimated to be $438 million for water and $1,870 million for sewerage.

Small communities face overwhelming financial problems in providing central water and sewer systems. Also, the proliferation of small water and sewer systems raises problems of management, economies of scale and the delivery of service at lowest possible cost. The higher water and sewer rates of small systems have a negative effect on industrial development and place a financial burden on low income residents.

Energy Impacted Areas

Standby authority, financing and technical assistance are needed to address community development and housing needs in areas impacted by energy production. The opening of new coal mines will place immediate burdens on municipalities and counties that must absorb population and employment increases over short periods of time. Atomic power plants proposed for construction, such as the Hartsville Plant and the Clinch River Breeder Reactor in Tennessee, also will generate high employment and population growth. Quick action will be needed to provide housing and supporting facilities, since these areas are characterized by high rates of substandard and overcrowded housing, very low vacancy rates in the supply of sound housing and limited capacities in basic facilities for accommodating new development.

In the Appalachian areas of the six states, energy development impact has been projected to add by the year 2000, 508,000 more people with capital requirements of $4.28 billion for schools, public facilities, transportation, utilities, residences and land.

APPENDICES

TO BACKGROUND PAPER

FOR MID-APPALACHIA WHITE HOUSE CONFERENCE

ON DOMESTIC AND ECONOMIC AFFAIRS

A. SOCIOECONOMIC HISTORY

B. STATE PROFILES

OCTOBER 7, 1975

KNOXVILLE, TENNESSEE

Appendix A

SOCIOECONOMIC HISTORY

The region now known as Appalachia was the nation's first frontier. The Appalachian mountains, old but rugged, were tackled by only a few hardy pioneers in the late 1700's. Those who did settle on the steep hills and in the deep, narrow valleys of Appalachia were, by and large, those people for whom the Eastern Seaboard had become too "crowded." During the great westward movement, these early settlers were joined by others who also found the seclusion of the mountains to their liking.

In the early years much of the Mid-Appalachian area was heavily covered with virgin timber which became the first major industry; then came the discovery of coal. Few Appalachians realized the value of the discovery; even fewer had the capital with which to engage in mining. Outside interests flocked to the Region, buying up land and mineral rights from unwitting Appalachians who sold often for a few cents an acre. But by this time, it was becoming impossible for a man to support his family by hunting and marginal farming, and the jobs created by mining were welcomed. Thousands went into the mines as soon as they were old enough to work.

The economy -- particularly in West Virginia, southwestern Virginia, eastern Kentucky and the Tennessee Cumberlands -- was tied directly into coal. The low tax bases of the states, none of which levied severance taxes, benefited little from the extraction of the coal except through the jobs created. The thriving coal industry did contribute greatly to the economy in many ways, however. During the boom period of the 1940s, Appalachian coal production reached 471 million tons per year, or 74.8 percent of the total U.S. production. West Virginia, Kentucky and parts of Virginia and Tennessee, along with Pennsylvania, were responsible for the bulk of the Appalachian production.

However, during the 1950s and 1960s, changing technology in the mining industry, plus shifts in demand to other less costly, more efficient energy sources, resulted in sharp declines in Appalachian coal mining production and employment. The impact of these declines was the most severe in the Mid-Appalachian coal fields which did not have an alternative industrial base to take up the sudden slack in employment opportunity or to provide some measure of economic stability. The net result was a sharp increase in unemployment and substantial out-migration of workers and their families from the coal field in search of employment opportunities elsewhere.

Mid-Appalachia offered little to attract new industry. The highways were predominantly two-lane twisting roads that greatly distorted the relationship between travel time and distance. A sixty-mile drive often took two hours or more in good weather. As a result, Mid-Appalachians even today tend to express distance not in miles but in time. Mid-Appalachia was, therefore, isolated not only from the major markets but from other sections of the Region. Not only did the inadequate, dangerous roads hinder industrial development; they cut people off from the already limited human services such as health care.

With no work and no prospect of work, out-migration soared. In the late 1950s, 2.2 million more people left the Region than had moved in. Of the Mid-Appalachian states, eastern Kentucky, and West Virginia suffered the greatest losses, with southeastern Virginia and eastern Tennessee close behind. Of those who remained, a large proportion were the very young and the very old -- those who most need, but can least afford, human services.

By the early 1960s, Appalachia's situation was desperate. The Appalachian unemployment level in 1960 was over seven percent as compared to the national average of about five percent. By 1965 West Virginia's unemployment rate hit eight percent; in eastern Kentucky it went to over ten percent.

Per capita income figures for 1959 (1960 Census) showed Appalachia with an average of $1,438 per capita income as compared to $1,850 for the nation. Eastern Kentucky's per capita income was an astounding $866, the lowest in Appalachia.

Isolated from the rest of the country by its mountains and inadequate highway systems, Appalachia was a region apart. Its major industry was on the decline, and there was nothing to take its place. The states' available monies were being used to provide minimal public services; little was left over for highways or the public works essential to attracting new industry. A tradition of welfare already had been established and the increased unemployment only added to the welfare rolls.

It was at this point that the nation began to recognize that Appalachia was an island of poverty in an otherwise prospering nation. The degree of poverty, in fact, shocked the nation into action. The President appointed the President's Appalachian Regional Commission to identify the problems and recommend actions. Shortly after the report was presented to the President, the Congress passed the Appalachian Regional Development Act which not only identified the Region, but established a program to provide special aid to it. It also created the Appalachian Regional Commission to administer the program.

The Act recognized that Appalachia needed much more than a campaign to attract new industry to the Region; it needed first to develop the infrastructure, community facilities and human services necessary to support industry, and the transportation systems that would make it possible for industry to locate in the Region and still quickly and easily reach the major markets to the East and West. On the other hand, the Region needed not another welfare program or an agency to over-promise what seemed politically popular; it needed the commitment and the means to do the long-range, non-glamorous, pedestrian (yet critical) job of selecting those parts of the Region which had the best potential for self-sufficiency and to provide such areas with the public works and other infrastructure necessary to attract stable, tax-paying, good wage-paying industry. The legislation also recognized the unique heritage of an independent people by creating the Commission as a federal-state partnership rather than a strictly federal agency.

For purposes of economic development, the Region can be divided into three distinct subregions -- northern Appalachia, southern Appalachia and central Appalachia. Northern Appalachia includes parts of New York, Pennsylvania, Ohio, Maryland and West Virginia, and its economic base is characterized by an urban environment which is old, outmoded and, in many places deteriorating. Most of its economic advantage was based upon its location, an advantage it lost with the decline of the railroads. Technological advances in manufacturing bypassed the area, severely limiting its ability to compete with other manufacturing regions. Southern Appalachia includes portions of Alabama, Georgia, Mississippi, North and South Carolina, Tennessee and Virginia. Its economic problems are dominated by extractive and labor-intensive industrial activities, isolation from national markets and low-income levels. The third area, central Appalachia, is the area that most generally fits the national "Appalachian" image. The mainstay of its economy -- primary production from coal mines and forests, along with subsistence agriculture -- had never brought much money into the area. The income levels are generally the lowest, unemployment and public dependency the highest.

Mid-Appalachia, then, is made up primarily of states that reflect the intense problems of central Appalachia but also touch upon issues common to the Region as a whole.

Appendix B

INDIVIDUAL STATE PROFILES

Kentucky

The Bluegrass State is known for its bountiful agriculture, its timber and coal, horsebreeders, and mountaineers and the unusual mountain topography that for generations has isolated the eastern portion of the state from the more prosperous regions of the center and west.

Kentucky's boundaries encompass 40,935 square miles shaped in the form of an irregular triangle, or in the words of humorist and native son Irvin S. Cobb, the figure of a camel attempting to rise. The 1975 estimated population of Kentucky is 3,376,880 with most of the population concentrated in the center and west. Approximately 939,440 persons reside in the eastern Appalachian portion of Kentucky.

Kentucky is a strong rural state of small towns and crossroads. In the early 1970s only Louisville, Lexington and the Cincinnati, Ohio,suburban zone,including Covington and Newport,had populations greater than 100,000. Other important cities are Paducah, Ashland and the capital, Frankfort.

Although the amount of farm acreage has decreased in recent decades, corn, hay and soybeans remain major crops. Kentucky now ranks number one nationally in coal production. Petroleum, natural gas, asphalt and iron ores are also among the state's resources. Lumbering and allied furniture and woodworking industries remain important, despite rapid depletion of the forests.

Kentucky's labor force comprises about half the population, with men outnumbering women workers by four-to-one. About one-eighth of the workers are employed in agriculture. Among industrial and commercial employees, more than one-quarter are engaged in manufacturing and over one-fifth in wholesale and retail trade, with government, service and miscellaneous industries, transportation and public utilities and mining next in order of importance. Of non-agricultural workers, one-quarter are unionized. The labor union tradition is especially strong in eastern Kentucky, and the United Mine Workers of America is influential.

The Appalachian area contains 28 percent of the state's population and 43 percent of its land area. Between 1950 and 1960 a net outflow of 341,000 persons, mostly young, left this area for cities outside and inside the state. A slump in coal mining employment in the 1950s had led to the mushrooming of public assistance and unemployment insurance. In 1960 the per capita income was less than 45 percent of the national average. Lack of developable land, at a reasonable cost, for housing and industrial use has been a major obstacle to economic diversification.

With careful and imaginative planning, the situation has been somewhat alleviated. Significant progress has been made in new highway construction to bring eastern Kentucky areas out of their isolation. The state has completed construction of many vocational schools to upgrade the technical skills of its work force. Kentucky also recently has enacted a coal severance tax returning to coal-producing counties substantial sums which can be used for community development purposes.

Per capita income* gained almost nine percentage points relative to the national average during the 1960's and reached $2,201 in Appalachian Kentucky in 1972, 58 percent of the national average of $3,781 at this time. Net outmigration slowed to 155,000 (less than one-half of the previous decade's number) in 1960-70, and turned the corner in 1970-75, when net immigration amounted to 3.4 percent of the Appalachian Kentucky population; but only 1.3 percent for the state as a whole. Manufacturing employment almost doubled and new manufacturing plants tripled between 1960 and 1970. Yet 19.2 percent of the state's families and 33.6 percent of its Appalachians had family incomes below the national poverty level in 1970,

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* All per capita income data in the State Profiles are 1972 per capita money income estimates by the U.S. Bureau of the Census for general revenue sharing. This series is compatible with the income data from the 1960 and 1970 U.S. Census data, but is not compatible with the Bureau of Economic Analysis estimates for per capita total personal income published in the *Survey of Current Business.*

and 2 1/2 times the national average were receiving public assistance. The unemployment rate in June 1975 was 7.7 percent statewide.

North Carolina

The state is divided into three main regions: the Appalachian Highlands, which boast the highest peaks east of the Mississippi River; the Piedmont Plateau, a province of rolling forested hills containing a majority of the state's population and industry; and the Coastal Plains, consisting of a well-drained interior leading to a swampy tidewater area along the coastline.

It is the leading industrial and agricultural state in the southeast and, after Florida, the most populous state. In its 52,586 square miles live 5,405,328 people (1975 mean estimate), giving North Carolina a population density of 104 people per square mile -- almost twice that of the U.S. as a whole. Most major cities are located in the Piedmont crescent. Among these cities are: Charlotte, Greensboro, High Point, Winston-Salem, Durham and the capital, Raleigh. The Appalachian portion of the state contains 24 percent of its land area, primarily located in the mountainous region, and 21 percent of its population. Winston-Salem is the major city in the Appalachian area.

The state's economy depends on manufacturing and agriculture -- although tourism, which brought the state an estimated income of over $800 million in the early 1970s, is growing in importance. The state leads the U.S. in production of textiles, bricks, household furniture and cigarettes. With the largest farm population in the U.S., North Carolina grows more tobacco than any other state and produces substantial crops of sweet potatoes, peanuts, cotton, corn and soybeans. Poultry products and mineral production are other large commercial enterprises.

Despite North Carolina's population density and the large industrial employment, the population is more rural than urban. This is because many industrial plants are located in small towns, and workers tend to commute long distances and live in rural areas. Most of the labor force is unorganized.

Even though its economy is expanding, North Carolina remains below the national average in such areas as per capita income and state expenditures for social services. In 1970, 22.2 percent of the population was black and had a considerably shorter life span than the white population, reflecting wide variations in living conditions.

In the Appalachian area of the state, per capita income in 1972 was $3,136, compared to $3,781 in the nation as a whole. Median family income was $7,774 in the state in 1969, and $7,466 in its Appalachian sector. Statewide, 16.3 percent of the families were living below the national poverty level in 1970; 16.1 percent of its Appalachian families were in this category during the same period.

Immigration in the 1970-75 period amounted to a net rate of 1.95 percent for the state as a whole, and 3.6 percent in its Appalachian portion, reflecting a substantial increase in employment opportunities. Yet the unemployment rate in June, 1975 was 9.2 percent statewide, and 11.7 percent in the Asheville metropolitan area.

South Carolina

The land in South Carolina slopes from the Blue Ridge Mountains of the northwest, through thick pine forests and fertile farmlands with great fields of cotton and tobacco, to the beaches and busy ports on the Atlantic. Deep-sea and inland fishing, hunting, the charm of "ante bellum" homes, public gardens and shore resorts are among the state's attractions.

Although most of the population lives in rural areas, South Carolina is not primarily an agricultural state. Its farms do produce large crops of tobacco, soybeans, cotton and peaches, as well as livestock, but manufacturing is by far the major source of income. Textiles are most important, followed by chemicals, apparel, paper, lumber, food processing, machinery and stone-clay-glass products.

Its mineral reserves are limited, but the state has great natural resources in water power and forests. Approximately 62 percent of the land area of the state is woodland.

Although urbanization has been increasing, more than half the population -- 2,814,162 in 1975 -- still lives in localities of 2,500 or fewer. According to the 1970 census, greatest growth is occurring in the four major urban areas of Charleston, Columbia, Greenville and Spartanburg.

Population distribution is uneven. A substantial portion of the state is lightly populated, particularly portions of the outer Coastal Plain, while dense population may be found in the upper Piedmont, along the fall zone between the Coastal Plain and Piedmont regions, and in concentrations along the coast. In 1970, one-third of the population was black.

In fiscal year 1970-71, the state and local governments spent only $327 per capita on such functions as education, public welfare, hospitals and sanitation, compared to a national average of $416.

The Appalachian portion of the state contains six counties, 13 percent of the state's land area and almost 25 percent of its population. It is an area undergoing considerable economic growth and development, particularly in textiles.

Per capita income was $3,227 in 1972 in the Appalachian portion of the state, compared to $3,781 nationwide at the same time. The median family income is actually higher in the Appalachian portion of the state than in the state as a whole: $8,229 in 1970, compared to $7,621 in the entire state; 13 percent of the Appalachian families and 19 percent of the South Carolina population were below the national poverty level at that time. The state is attracting in-migrants at a higher rate than any of the other Mid-Appalachian states, with a net rate during the period 1970 to 1975 of 3.4 percent in the entire state and 6.5 percent in Appalachia. Unemployment in June, 1975, however, was 12.2 percent statewide, and 10.7 percent in the selected Appalachian area of Greenville-Spartanburg, having risen rapidly over the past year.

Tennessee

"The Volunteer State" of Tennessee contains 42,244 square miles and, according to the 1975 estimate, 4,155,182 people. About 47 percent of the state's land area and 45 percent of its population are located in the Appalachian Region.

The geography of this state is striking: over 432 miles in length, only a narrow 112 miles in width. In general, the surface slopes from east to west, from the Great Smoky Mountains, with peaks rising to elevations of more than 6,000 feet, to the Mississippi bottoms, where considerable areas are less than 300 feet above sea level. There are approximately

2,500 square miles of bottom land and as many that are mountainous, but most of the state is hilly.

Tennessee's agricultural resources are slim. Almost 70 percent of the land is unfit or poor for cultivation, and less than 2 percent is classified as good. Production of the state's agricultural crops -- chiefly cotton, tobacco, corn and hay -- occupies less than a fourth of the labor force. Almost half of the cash farm income comes from livestock and livestock products.

The long east-west extension of Tennessee embraces a diversified assemblage of mineral resources, including zinc, stone, cement, coal, phosphate and clays. Manufacturing is highly varied, with a diversification unequaled in the South. Among the leading industrial groups are: chemicals; food processing; textiles; primary and fabricated metals; apparel; pulp and paper; and electrical machinery. From 1960 to 1970, manufacturing employment increased by 50 percent. Forest products also are important, providing full-time jobs to over 40,000 persons.

The Tennessee Valley Authority, established in the 1930s to control the Tennessee River for navigation and power and to prevent flooding, is based in Knoxville. It is a major power producer and also the site of considerable research and development of solid waste recycling and resource recovery.

The state is becoming increasingly attractive to tourists, and particularly to music fans who acclaim Nashville as the national center for country and western music. Other recreation attractions are the Great Smoky Mountains National Park, Cherokee National Forest and the Chickamauga battlefield.

Tennessee has four cities with populations of more than 100,000: Memphis, the capital, Nashville; Knoxville; and Chattanooga. Yet what most typifies the inhabited Tennessee landscape are small towns and farms. In 1970, 57 of the 95 counties had fewer than 25,000 people. The state's urbanization of 59 percent represents an increase of seven percentage points during the 1960s, which means that Tennessee is urbanizing more rapidly than the U.S. as a whole, which went from 70 percent to 73.5 percent. At least one reason for this increase in Tennessee is a shift in the location of manufacturing jobs from major cities to smaller ones.

The income growth rate also has been sluggish. This is at least partially due to the fact that the state has not generated enough labor-intensive, service-related employment in its large-sized cities. There has been considerable development, however, in smaller urban areas such as Johnson City, Kingsport and Bristol, and smaller towns such as Cookeville, Tullahoma, Smithville and Morristown.

Tennessee's social needs are many, but its expenditures for public needs in relation to national figures are low. The state population ranks low in educational attainments, and in 1970 one out of 16 persons received welfare funds of some sort. In 1970, 23 percent of Tennessee's families, and 19.1 percent of those in its Appalachian area, had incomes below the national poverty level. Per capita income in the Appalachian portion of the state was $2,927 in 1972, compared to $3,781 for the nation. Unemployment in June 1975 was set at 9.4 percent statewide; 7.2 percent and 8.6 percent, respectively, in the metropolitan areas of Knoxville and Nashville.

Out-migration appears to have reversed. In the period from 1970 to 1975, the population enjoyed a net migration increase of 2.2 percent in the entire state, and 3.6 percent in Appalachian Tennessee.

Virginia

The Commonwealth of Virginia is famed for its colonial heritage, its statesmen,stately mansions and great battlefields of the Revolutionary and Civil Wars.

In April 1975, about 4,949,507 persons were located within its 40,817 square miles. The state's principal geographic features are the Coastal Plain, or Tidewater; the Central Piedmont, a plateau which rises westerly to the Blue Ridge Mountains; and beyond the Blue Ridge, and between it and the Alleghenies on the state's western border, lies the rich farming region of the Shenandoah Valley.

The fastest growing sectors of the economy are services, retail trade, transportation and public utilities. Virginia's manufacturing industries also have grown steadily and are diversified. The largest industries are chemicals, textiles, food products and clothing. Manufacturing employs more than four times the number employed in agriculture but agriculture is nonetheless a vital economic factor. Virginia ranks among U.S. leaders in growth of tobacco, peanuts, apples and sweet potatoes. More than half the state's farm receipts come from livestock.

Coal is the leading mineral commodity, although lime, zinc, stone and cement also are important. The state's commercial fishing catch was second largest among the states. Its heritage and the natural beauty of its bay, beaches and Blue Ridge scenery offer much potential for recreation and tourism.

According to the 1970 census, Virginia's black population -- about 20 percent of the society -- is located largely in the Piedmont and Tidewater regions. The census also found the population to be about 63 percent urban, with greatest growth occurring in "The Urban Corridor" stretching along Interstate 95 south from Washington, D. C., through Arlington, Alexandria and Fredericksburg to the capital of Richmond and bending along I-64 southeast to Norfolk.

Appalachian Virginia covers an area of 9,397 square miles, located in the central and southwestern portions of the state, and contains 495,754 persons. This is about 24 percent of the state's land area, and 10 percent of its population. Natural resource-related income has been provided by the bituminous coal which dominates the economy of counties in central Appalachian Virginia, and by the extensive forests of southwest Virginia.

From 1960 to 1970 population of Virginia's Appalachian area declined 6 percent, while the whole state experienced a 17.2 percent population increase. This declining Appalachian pattern can be attributed largely to employment losses in agriculture and mining, which stimulated a net out-migration of 75,000 residents during this period. Today this has changed; both Appalachian Virginia and the state as a whole registered a net in-migration increase of 2.4 percent in the period from 1970 to 1975.

The Appalachian portion of the state had a median family income of $6,536 in 1970. This income level is relatively low, since it compares with $9,049 in the state as a whole, $7,941 in the 13-state

Appalachian Region as a whole and $9,590 in the nation. Pocketed poverty was also suggested by an average 1972 per capita income of $2,624 in Appalachian Virginia, compared to the U.S. figures of $3,781. Strong efforts are being made, however, to diversify the economy of the Appalachian portion of the state. Unemployment in June 1975 was 7.6 percent throughout the state, and approximately 7.8 percent in the Appalachian area near Roanoke.

West Virginia

West Virginia might be described as about 24,000 miles of mountain. The broad tongue of the Shenandoah Valley on its eastern fringes rises to the rugged mountain highlands which dominate the central portion of the state and gradually give way to the Ohio Valley to the west. Economically and socially, the Region has long been tied to these mountain spines, and to the coal which is in them.

West Virginia is second only to Kentucky in U.S. coal production, providing about 25 percent of the nation's total. Coal accounts for 88 percent of the total value of the state's mineral production, although production and marketing of natural gas is also significant.

The economy has always been coal-dependent and as coal has become more automated and less labor-intensive, communities have had to diversify their economic base or die -- and the economic transformation is a difficult one. Augmenting this problem is the fact that many of the state's natural resources are not owned by West Virginians; almost two-thirds of coal mines, for example, are owned by out-of-state companies.

The hilly terrain is not conducive to large-scale agriculture. Production of a wide variety of chemicals dominates the manufacturing field, with large plants centered along the Ohio and Kanawha Rivers. Modernization of established industries, such as steel and glass, has aided the economy. Tourism also is being promoted, and more than one million acres have been set aside for recreation in 34 state parks, nine state forests and two national forests.

Although a sizeable portion of the population can be found living in the river cities of Charleston, Huntington, Wheeling, Weirton and Parkersburg, most of the state's residents are locked into small rural communities and narrow isolated valleys.

The gnarled landscape also has made transportation and communication difficult, denying West Virginians ready access to education and health facilities, alternative job markets, and the cross-currents of mainstream America. Perhaps as a result of its immobility, the population is fiercely independent, suspicious of strangers and do-gooders, stubborn, self-reliant and somewhat xenophobic.

Like much of Appalachia, West Virginia suffered intensely from out-migration during the 1950s and 1960s. From 1960 to 1970 West Virginia experienced the largest net decline in population of any state in America and a total loss of 100,000 persons. Today the trend is gradually reversing, at least in part because the state has made major investments to improve its transportation systems. Between April 1970 and April 1975, West Virginia actually experienced a net migration increase of 0.4 percent estimated at 7,000 persons.

From 1960 to 1970 per capita income and total personal income increased about 60 percent; the value of manufacturing production went up 78 percent; bank deposits grew by 92 percent. The increases in per capita and total personal income, however, remain well below the national average. The 1970 median family income, $7,415, was below the Appalachian average, with 18 percent of families living below the national poverty level. As of June 1975, the statewide unemployment rate was 7.7 percent.

The entire state, which had a population estimated at 1,795,642 in April 1975, is included in the area which Congress defines as "Appalachia." West Virginia is the only state wholly within this Appalachian Region.