Chapter 4

The Elements of Program . . .

The program recommendations of the Commission fall naturally into three groupings. The first two involve investment—investment in social overhead and investment in human and economic resource development, which are, however, closely interdependent. For example, an investment in educational facilities alone, unaccompanied by other measures which would create employment opportunities, would not aid the region's economic growth and might actually hamper its progress by producing an increased outmigration of the more capable. Similarly, a single-minded development of the natural resources of Appalachia would be as ineffective now as it was in the past in sustaining regional income, unless it were coupled with programs designed to develop other job opportunities in industries which would process these resources. Only a balanced, coordinated series of programs can achieve the goals of this Commission and of the region.

To achieve this balance of programing, over a period of time, the third set of recommendations provides for a new organization. These recommendations set forth the nature of an organization needed to allow existing and proposed public and private agencies and interests at State, national and local levels to focus on the realistically defined problems of this region.

The following program recommendations—although they can only be presented as individual items—must be regarded as a total effort in which no single item, regardless of its relative cost, has greater or less valid claim to serious consideration than any other.

The Commission has identified four priority areas of investment for the immediate future:

(*a*) The provisions of access both to and within the region.

(*b*) Programs to use more fully the region's great natural resources—coal, timber, and arable land.

(*c*) Construction of facilities both to control and exploit the abundant rainfall of Appalachia.

(*d*) Programs in which immediate improvements in human resources can be attained.

Finally—and this cannot be stressed too strongly—these program recommendations are not to be regarded as providing a definitive solution for the many-sided Appalachian problem. That solution can come about only with the full engagement of the free enterprise potential in this large region so rich in human and natural resources. Moreover, progress can be realized only through the coordinated effort of a regional development organization, working with State and local development units, with research and demonstration centers, and with multiple State and Federal agencies.

The program outlined here is only the first step—what can be and what must be initiated now—to bring the extensive subsistence-level areas of Appalachia up to a capability where they may enter the free-enterprise orbit. The program which follows is, then, presented not as the solution but as the indispensable groundwork for a solution.

Access

HIGHWAYS

Developmental activity in Appalachia cannot proceed until the regional isolation has been overcome Its cities and towns, its areas of natural wealth and its areas of recreation and industrial potential must be penetrated by a transportation network which provides access to and from the rest of the Nation and within the region itself. No analysis of the regional problem has failed to identify the historic and persisting barrier-effect of its mountain-chains as a primary factor in Appalachian underdevelopment. The Commission recommends a mix of investment and timing which gives the single problem of access a double priority of emphasis.

The highway access program comprises no less than 35 percent of the Federal investment recommended for expenditure in fiscal year 1965. Indeed, the figure would be higher—so fundamental and so immediately urgent is this aspect of the program in the view of the Commission—were it not limited by the funding ability of the States and the time required for planning, location, design, and land acquisition. The remoteness and isolation of this region, lying directly adjacent to the greatest concentrations of people and wealth in the country, is the very basis of the Appalachian lag. Its penetration by an adequate transportation network is the first requisite of its full participation in industrial America.

The backbone for such a network is the Interstate Highway System. But much of the region will not be directly served by it. In addition, some of the areas served by the Interstate System have accessibility in one direction only and lack access to and from areas

to the north and south or to the east and west. Five large areas may be so identified:

1. An area at the intersection of Georgia, Tennessee, and North Carolina.
2. An area at the intersection of southeastern Kentucky, southwestern Virginia and West Virginia, and northeast Tennessee.
3. West Virginia and the area of its intersection with Maryland and Pennsylvania.
4. Central Pennsylvania.
5. The Cumberland Plateau area of Tennessee.

To provide access between these isolated areas and the corridors of the Interstate System, the Commission's highway team, in cooperation with the highway departments of the Appalachian States, has evolved a design for the type of a development highway system which is needed. This system is based upon criteria different from those normally employed. Instead of upgrading or expanding the most heavily traveled routes, a development system seeks to stimulate the flow of people and goods to and through remote areas which have a developmental potential; it seeks, in short, to create traffic and to open up areas where commerce and communication of people with people have been sorely inhibited by lack of ready access.

In all of the Appalachian States, unappropriated and unreserved public lands and nontaxable Indian lands comprise less than 5 percent of the land area. Therefore, none of the States involved qualify for adjustment of the Federal-State matching ratio under existing law. Thus the Appalachian States which, because of mountainous terrain and inadequate State matching funds, are most in need of adjustment of existing ratios, are denied it under the current law. Moreover, ABC funds available to each State are limited and must be allocated throughout the State. As noted, most of the States are already devoting a disproportionate share of these funds to the Appalachian portions of their States; more cannot be done within existing limitations. The construction of additional mileage of development routes must be authorized if Appalachia is to be assisted in its developmental effort, and the Federal contribution must be such that it realistically mirrors State abilities to match.

Recommendations

1. Authorize the construction of a development highway system comprising: New long-distance or intercity routes built to high-type primary standards and capable of improvement to higher standards to improve access into and within the region by upgrading existing roads and by constructing new sections where necessary. Overall design and corridor location criteria of the proposed development

system should be formulated by the Appalachian Regional Commission as its first order of business. Its major characteristics, however, are clearly illustrated on the accompanying map. The mileage to be constructed in each State is shown in appendix B.

2. Authorize the construction of 500 miles of local access roads which would serve specific facilities such as those of a recreational, residential, or industrial nature and would facilitate the States' school consolidation programs. There should be broad flexibility in the assignment of highway mileage funds between the development of long-distance or intercity routes and the development of local access roads; the systems of development highways which are a part of the Appalachian program should include but not be limited to any previously existing system of Federal aid highways.

3. Coordinate this development highway system with the present ABC and interstate highway programs and with all other phases of overall regional development. Require that funds should be available for this development system in any State only after a showing has been made that the State is using a fair share of its regular Federal-aid highway funds in the Appalachian area.

4. Implement this development highway program by utilizing the procedures of the Federal-aid highway program (planning, location, design, and construction by the State with the approval of the Secretary of Commerce), but with different location criteria and with Federal financial support based upon the realistic capacity of the States involved to undertake additional highway expenditures. Federal financial support should be provided out of general revenue and it should be founded on a program in which the Federal Government would participate to a much greater extent than its present 50 percent contribution under the ABC system. Such a program will have to be precisely spelled out before implementing legislation is introduced. The Commission estimates the total cost of this highway program, as illustrated, at $1.2 billion.

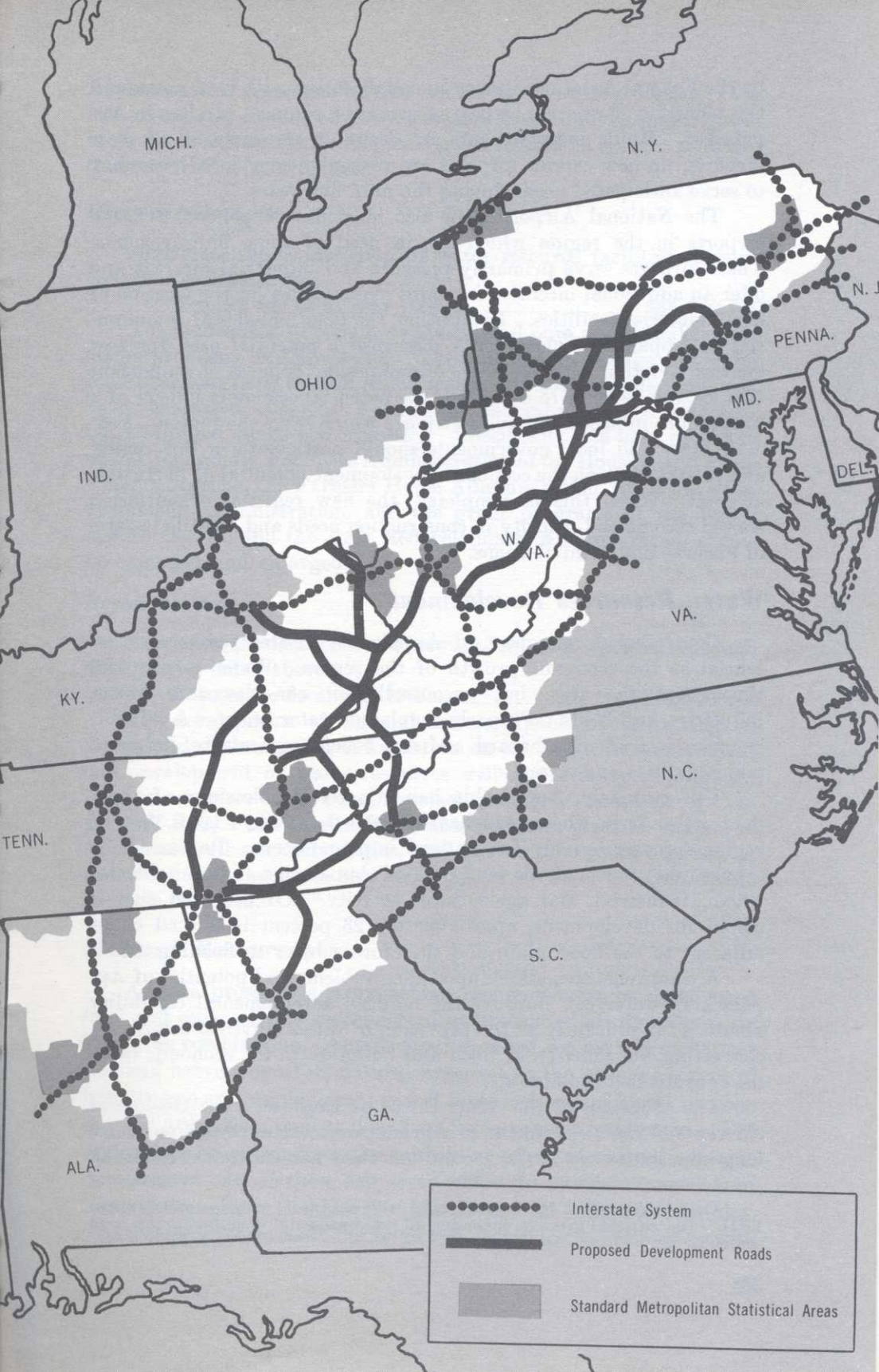
5. Construct those sections of the National Parkways including the Blue Ridge and the Allegheny, which will provide recreation links with the development highway system or the Interstate System. The Commission recognizes that the construction of parkways in Appalachia must be in consonance with total national parkway needs.

Request for fiscal year 1965 ..... 90,000,000 [1]

AIRPORTS

Air service is essential to the economic vitality of Appalachia, and improved service could make an important contribution to furthering the development of the region. The National Airport Plan, prepared

[1] The sum requested here, as in all other requests contained in this report, represents only Federal funds.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S. C.
GA.
ALA.
Interstate System
Proposed Development Roads
Standard Metropolitan Statistical Areas

by the Federal Aviation Agency in collaboration with local communities identifies 56 existing airports serviced by common carriers in Appalachia. While improvements are desirable at nearly all of these airports, no new carrier airports are presently considered necessary to serve anticipated needs during the next five years.

The National Airport Plan also identifies 66 general aviation airports in the region which are in need of some improvements. These airports serve primarily pleasure and industrial aircraft and offer an additional incentive in many communities for the location of new industrial facilities. In addition, the plan includes 61 communities in Appalachia where FAA identified a potential need for new general aviation airports. The Commission believes it important that studies be made to determine the potential economic impact of a program to improve and build airports which serve the region. Federal, State and local governments should participate in this review and should focus on the economic development potential of particular airports. When this is completed, the new regional organization should recommend priority in construction needs and a realistic ratio of Federal-State contributions.

Water Resources Development

Controlled development of Appalachia's water resources is essential to the economic growth of the region. Water is plentiful throughout the area, but uncontrolled it can devastate towns, industries, and fields. Properly regulated, water becomes a valuable resource instead of a hazard and can benefit agriculture, industry, municipalities, and recreation.

Unfortunately, Appalachia has enjoyed the blessings of abundant water only where man has intervened to create lakes, for the region enjoys relatively few natural impoundments. Because of its topography, much of the land area of Appalachia is unsuitable for urban, industrial, and agricultural activity.[1] Of the land that is suited for development, approximately 23 percent is located on or adjacent to the flood plain and therefore subject to flooding.

A comprehensive attack upon the problems and potential of Appalachian water can improve the region's developmental capability almost as significantly as the provision of direct physical access—by converting the affliction of flood and pollution to the economic benefits of controlled abundance.

The programs of the Army Corps of Engineers, the Geological Survey and the Department of Agriculture to achieve this end have long been underway in the region, but their acceleration is essential.

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[1] Only 30 percent of the region's total land area is in soil capability classes I–III. The national average, including all the continental mountain areas, is 44 percent.

In that part of Appalachia lying within the Tennessee Valley, TVA has extensively developed the Tennessee River and its major tributaries; it is now working with local governments on specific problems that require further attention.

Recommendations

Accelerate the construction of water resource facilities through the agencies listed above.

Request for fiscal year 1965 ..... $35,800,000

The inadequacy of sewage treatment and pure water facilities are major problems in Appalachia. These deficits in sewage and water facilities, deterrents to both sound health and economic development, have been eased somewhat by existing Federal assistance programs, but additional funds are necessary. Specifically, the loan programs of the Community Facilities Administration of the Housing and Home Finance Agency, the Farmers Home Administration, the Area Redevelopment Administration, and the grant programs of the Public Health Service and the Area Redevelopment Administration should be extended and enlarged.

Recommendations

Accelerate the construction of sewage and water facilities through the agencies listed above.

Request for fiscal year 1965 ..... $10,000,000

The development of regional centers capable of conducting research and disseminating information on the scientific conservation and development of water resources will significantly enhance the longrun economic outlook for Appalachia. Early enactment by Congress of S. 2, a bill to establish water resources research centers at land-grant colleges, universities, and centers of competence, and to promote a more adequate national program of water research, would promote this goal.

Natural Resources

A more prosperous Appalachian economy must be based on a total and economically sophisticated utilization of all its natural resources in combination. Appalachia has relied too heavily on extraction and harvesting of its natural resources as the primary source of both income and employment; now it must look to their local processing and utilization, even as it seeks to increase their production. The region has benefited from the multiplier effect of natural resource development only in those few areas where the natural occurrence of mineral deposits in combination has created an industrial complex. The true productive contribution of this region to the national growth

must be found in the creation of such complexes throughout Appalachia by an application of its resource capability to new needs, new products, new uses.

The Commission's recommendations concerning natural resource development, then, are directed at the creation of new growth by creating a new employment of the region's natural riches, by orienting their utilization to emerging national and regional needs, by exploring new combinations of resource activity.

As the program proceeds, it must inevitably gather impetus from the very needs of the Appalachian people themselves; the satisfaction of their long-frustrated consumer wants will build a regional market, a demand for new plants, new freight facilities, new wholesale and retail outlets. This kind of development—increasing the purchasing power of a depressed population by increasing the productivity of an underutilized regional resource—represents a net contribution to national wealth and to GNP.

AGRICULTURE

The Commission's recommendations for Appalachian agriculture are directed toward an acceleration of the current trend in land use changes. Low-producing and cut-over woodlands, marginal and submarginal cropland, and even much of the better cropland are being converted to pasture. An acceleration of this land-use conversion will provide a more stable agricultural base for the regional economy.

Since many of the farmers in Appalachia have not been able to keep production costs low enough to be competitive with other regions, the number of farm families and farm employees has declined drastically in recent years. Crop production has also steadily declined, and a significant shift from grain to hay production has taken place. Appalachia's agriculture is now based primarily on livestock enterprises, with the value of livestock products sold increasing from $560 million in 1950 to $935 million in 1960. During this period, beef cow numbers increased by 135 percent, the largest increase in any aspect of the region's agricultural production.

The major opportunity for Appalachia to increase its income from agriculture lies in further expansion of the livestock industry. The region contains millions of acres of undeveloped potential grazing land, much of it of only limited use for other purposes. Its development and use for beef production over the next few years would help to meet the Nation's rising demand for beef. Sufficient potential pasture land and a growing local market (the region presently imports beef) are available to sustain a substantial and profitable expansion of the cow-calf industry throughout the region.

While the Commission recognizes that opportunities do exist in particular localities for expansion of other types of agriculture pro-

duction, we believe that the potential in beef is so outstanding that the major regional effort in agriculture should be concentrated there.

Recommendations

1. Accelerate the regional pasture improvement and development program involving 9.5 million acres, including farm ponds, over a five-year period. This program would be financed through cost sharing for a maximum of 25 acres per farm, with the Federal share up to 80 percent, on the pattern of the existing agricultural conservation program. Moderate interest loans would be available through the Department of Agriculture to assist operators in paying the additional cost of developing the initial 25 acres and for converting or improving additional pasture above 25 acres. Credit will also be needed for buildings, basic livestock, etc.

This program, if carried out effectively, should return to the farmers in the region an additional gross income of approximately $690 million over the five-year-period, and a continuing gross income of approximately $230 million annually. The water retention structures on farms will also contribute to the development of the potential of Appalachian water, to erosion control and to recreation.

Request for fiscal year 1965 ..... $22,000,000
($8.5 million will be used for cost-sharing; $12 million will be used for loans; and $1.5 million for technical assistance.)

2. Establish a plant materials center to select and test plants best suited for pasture development and soil conservation in the region.

Request for fiscal year 1965 ..... $150,000

TIMBER

The forests of Appalachia offer one major resource for the revitalization of a regional economy. Appalachian hardwoods are famous throughout the Nation, and comprise 80 percent of both forest area and timber volume in the region. At present, supply exceeds the market demand, but a number of factors—prominently, population growth and technological advance—indicate a highly expanded future market in which Appalachia's maximum production will be needed.

Moreover, timber is a prime multiplier: the Forest Service estimates the value of sawtimber on the stump is increased 25 times as it is transported, processed, manufactured and sold as end products. In Appalachia, this multiplier effect on the harvested timber is all too often lost, as the veneer logs are shipped out of the region for processing and the pulpwood goes hundreds of miles to the mill. Even the present growth is underutilized within the region and its possible contribution to employment and local wealth is far from

realized. Measures to expand and diversify the region's forest industries must be undertaken.

The very size of the forest acreage makes this imperative, while the need for timber and forest products makes it both feasible and desirable. As noted, over three-fifths of the total land of Appalachia is forested. Some 48,000 people are directly employed annually in the timber harvest, worth $86 million on the stump, while for every two men so employed another five work in primary and secondary wood processing.

At present, timber growth is about double the volume harvested; but because of poor quality stands and heavy losses to fire, disease and insects, this growth is only a fraction of the potential, and the volume being added is generally low in quality.

The small private stands comprise over 70 percent of the region's total forest acreage. Upgrading in the past has been difficult because even when the individual owners are on the land themselves—and they often are not—they lack the knowledge, the equipment, the funds, or the time to manage their woodlands for better production.

Finally, of course, there are forested areas so depleted and in such small tracts that no kind of private ownership, however enlightened, could contemplate their consolidation and rehabilitation as a feasible enterprise. But these same areas, under consolidated management, would serve recreational and wildlife uses and could eventually produce timber of high quality. The desirability of their inclusion in public forest is apparent.

The Commission has discussed these aspects of the Appalachian timber situation with many individuals and groups, members of Federal and State agencies, private foresters and members of the timber industry.

Recommendations

1. Expand research for product improvement and development to permit utilization of larger quantities of low-quality hardwood timber in Appalachia and for exploration of new timber markets.

2. Accelerate the construction of access roads in the national forests to enable the harvesting of the full allowable cut of marketable timber. The Appalachian Regional Commission should give early consideration to the problem of access within the State-owned forest lands of Appalachia.

3. Initiate a technical assistance program for locally established and locally financed management-manufacturing-marketing complexes to introduce growers, loggers, and small millowners to the advantages of skillfully meshed operations. This will enable the essential combination of product diversification, strong capital structure, an aggressive marketing organization and highly trained labor and management

skills to be brought to bear upon timber production, wood products manufacture and marketing.

4. Include in the national forest two areas incorporating certain acreages of depleted forest or strip-mined land which need to be restored to full productivity. The first is a proposed unit within a 1 million acre area in southcentral West Virginia bordering the Monongahela National Forest. The second is a proposed unit within a 4.3 million acre area in the headwaters region of the Cumberland, the Kentucky, the Licking and the Big Sandy Rivers in eastern Kentucky.

5. Encourage and assist groups of local leaders such as a Soil Conservation District, a development district, or an association of landowners, under State charter, to carry out a timber development program. Such a group, referred to as a Timber Development Organization (TDO), would achieve (a) continuity of management, cutting practices and marketing in which landowners may or may not be directly involved, and (b) administrative, if not physical, consolidation of small holdings into efficient management units. The program would guarantee a return to the owner and at the same time protect and restore the timberland to full productivity. It would demonstrate a feasible solution to the multiple problems of nonresident and fragmented timberland ownerships.

> The TDO would obtain the needed timber rights through management easements or lease-contracts from participating owners and by purchase of available tracts. Its effort would be concentrated on producing sustained yields of quality timber and on market exploration and sales promotion to develop outlets for the timber produced.
>
> The TDO would receive half its initial capital from Federal Government loans; State governments would be encouraged to make similar loans or purchase securities of the TDO, with the balance of the 50 percent matching funds to be derived from sale of preferred and/or common stock to private and corporate investors.
>
> Where TDO's are not formed, farmers and wood processors would continue to be eligible for farm forestry loans and ACP assistance from the Department of Agriculture; credit from the Small Business Administration, the Area Redevelopment Administration and the Bank for Cooperatives; and assistance through an acceleration of existing Federal-State cooperative programs.

The special budget request for these program recommendations in fiscal year 1965 includes product and market research in Appalachian hardwoods by the Department of Agriculture, 125 miles of access roads in Appalachian National Forests, two demonstration management marketing complexes, Federal land acquisition in West Virginia

and in eastern Kentucky, and demonstration Timber Development Organizations.

Request for fiscal year 1965 ..... $6,700,000

MINERALS

Coal is still the region's number one material resource, capable of economic production as well as of further development, but it has ceased to be the region's number one source of nonagricultural employment. Although the demand for coal will undoubtedly increase, and possibly double between now and 1980, debate continues as to whether increased demand will overcome the effects of mechanization and create more mining jobs than exist today. In the decade 1951–61, production of coal declined 32 percent in Appalachia; employment in coal, in the same period, declined 66 percent. Although coal output has recovered approximately 12 percent since 1961, employment has continued to decline.

Much of the Appalachian economy has long been structured around coal mining and its related activities. All efforts at increasing coal production—both for domestic and foreign uses—must be vigorously pursued if the region is to obtain maximum economic benefit from this resource. Appalachia mines about two-thirds of the Nation's bituminous coal and all of its anthracite. Growing reliance on coal-fired electric generation, recent expansion of coal exports (which promises to continue as long as prices are competitive), anticipated expansion of high-voltage power transmission from generating plants located at or near the mine mouth, hoped-for success of pilot efforts to convert coal to gasoline at competitive cost—all of these current and potential developments hold promise of substantial increase in mining activity which will be of benefit to the region generally.

If, as expected, the production of coal continues to increase, or is maintained only at its present rate, depletion of reserves suitable for strip and auger mining will probably require that a larger proportion be mined underground. Such a change could bring about an increase in employment. Underground mines require more manpower than strip and auger mines. Also, greater skills are required. This potential shift back toward underground mining seems unlikely, however, to increase direct employment in coal mining sufficient to absorb the present job deficit. Alternative employment will be required.

The most promising opportunities for industrial diversification within the region appear to be in localized processing and utilization of coal in conjunction with other resources. Onsite conversion of coal to electric power and to liquid and gaseous fuels, together with the region's considerable supplies of natural gas, might well provide the

energy base for mining-manufacturing complexes of large potential benefit to the people of the region. Further research, as well as economic appraisal of these possibilities, are required by both government and industry if they are to become a reality.

Although Appalachia is not rich in metallic minerals, the growth of metals and metallic processing as a source of employment is encouraging. Between 1950 and 1960, the Appalachian portion of every one of the States showed an increase in employment in the fabricated metals industries. In the Appalachian portion of all but two of the States, an increase is shown in the primary metals group. [*See appendix C, table 10.*]

Ranking high as a source of manufacturing employment in several of the States is the processing of industrial minerals—stone, clay, sand, and shale. The processing of these minerals into ceramic products, glass, or bloated lightweight aggregates requires both heat and power. Freight costs are an important factor in the location of production of these bulky and fragile commodities, orienting their production toward regional rather than national markets. An expansion of construction in Appalachia and its adjacent areas would undoubtedly bring a large increase in this type of manufacture, utilizing local fuels and local raw materials.

Geologic surveying and mapping are basic to development of the mineral resources of the region. The Appalachian area is unusually fortunate in the amount of data available on its mineral resources, and both geologic and topographic maps of high quality are available. The U.S. Geological Survey is now engaged in an extensive program to improve and refine them. Credit is due to those States which have made substantial financial contributions to these programs.

After reassessing the Appalachian segments of its program, the U.S. Bureau of Mines has expanded its projects in the current fiscal year to aid in the development of the region's mineral resources. Projects initiated or expanded include studies of iron-bearing and submarginal aluminum resources. It is expected that the Bureau of Mines will continue to identify additional possibilities for development of the region's mineral resources and make every effort to adapt or expand its research and investigations as required.

The Office of Coal Research was established to expand the use of coal so that more coal will be mined, more coal sold, more miners and coal workers employed and coal-mining communities restored to health. Since the Appalachian region is so largely coal country, the entire program of that office relates directly to Appalachia and, as a consequence, merits strong support.

Although the region's mineral-based industrial potential is large, Appalachia is burdened by the aftereffects of unwise mining practices. It is estimated that at least 4,000 miles of Appalachian streams are

polluted by acid or alkaline mine drainage; spoil banks and burning refuse dumps are both an eyesore and a source of air pollution; and surface subsidence over anthracite workings is a serious problem in certain urban areas of Pennsylvania. For all its great value as a basic industry, mining, which draws upon a nonrenewable resource, disturbs or destroys renewable surface resources. Appalachia, aware of its very large and valuable recreational attractions—both for tourists and those seeking an open and suitable environment in which to live and work—is finding that in the mining of its mineral resources much greater care should be taken to preserve and restore its land, water, forests, and fish and wildlife resources.

Recommendations

The Federal Government, through the Department of the Interior, should:

1. Pursue through its Bureau of Mines and Office of Coal Research investigation and research which hold prospect of benefit to the region.
2. Continue, through its Geological Survey, and expand as required, necessary geologic and topographic mapping as well as mineral exploration programs.
3. Press ahead in its current U.S. coal export expansion drive.
4. Develop through its Bureau of Mines more economical and practical means of reducing the formation and discharge of acids and alkalis from strip, auger, and underground mines.
5. Undertake, in cooperation with the States, private industry, and other Federal agencies, a study of strip and auger mining operations with a view to identifying appropriate and practical measures to minimize adverse effects of mining operations.

The Federal Government, through the Department of Interior and other appropriate agencies, should:

6. Engage in research and demonstration activity in problems of surface subsidence resulting from mining operations.

Request for fiscal year 1965 (Items 1–6) _____ $3,000,000

POWER

Developments in the field of power could have a marked impact upon the future economic situation of the Appalachian region. The magnitude of the impact will depend upon the role that Appalachian coal plays in the production of electric power. With the recent developments of large-size generating units and economical extra high-voltage transmission, the power production potential of the region is not a regional concern alone. It can help meet the expanding power

needs—not only of Appalachia but also of the Eastern seaboard and areas in the Midwest as well.

The future comparative costs of natural gas, fuel oil, and nuclear energy may be such that the coal of Appalachia will continue to be the major source of thermal power production for the Appalachian region and the surrounding area for the foreseeable future. The potential power market in the surrounding area is approximately three times the presently anticipated growth in Appalachia itself. Under these circumstances, a situation could develop where low-cost fuel and other minimum transmission costs would provide the major economies necessary for substantial development of mine mouth power. Such low-cost power, in addition to its export from the region, could be sufficient, given Appalachia's strategic location, to attract to the region additional industry strongly dependent upon low power costs and also to encourage the extensive development of related small-scale industry.

These coal-based power possibilities could be enhanced still further by the development of water installations designed to produce peaking power, operating in conjunction with low-cost base-load thermal plants. Such developments would not reduce requirements for coal, but would increase them.

Among the early concerns of the proposed regional organization should be initiation of studies looking toward these possibilities.

These studies should be conducted with the assistance and counsel of an advisory committee which includes representatives of private utilities, electric cooperatives, municipal systems, Federal and State agencies, and the public and should be coordinated with the present Federal Power Commission survey of national power requirements.

Recommendation

The proposed regional organization should initiate the studies discussed above.

RECREATION

Like its resources of coal and water, the scenic highlands of Appalachia have been as much handicap as blessing in the past, yet they hold great developmental promise. The Appalachians are the major mountains of the East and are a classic example of the folded ridge series, typified by multiple blind valleys leading often into passless ridges. This barrier effect has contributed to the region's underdevelopment; but it has also left scenic areas which can be developed to serve the country's greatest urban concentrations on the Atlantic seaboard and in the industrial centers of the Midwest and South.

Winter sports in the Appalachian chain extend as far south as Gatlinburg, Tenn., and Maggie Valley, N.C. (abetted by snow ma-

chines), while for the entire East the mountains offer a cool retreat from the humid heat of summer.

What the region has lacked for intensive recreation development, apart from accessibility, has been an abundance of natural lakes for water sports. Ample runoff is available, and the terrain lends itself to manmade impoundments. Also in need of developmental measures is game habitat. Fish and wildlife, once prevalent in great variety throughout the region, are now plentiful only in heavily forested areas where mining activity has not poisoned the streams with acid and alkaline drainage or drastically disturbed the ecology. In most of the mining areas, only the hardier, coarser species of small game persist—the raccoon, the opossum, the rabbit. In the more remote forested areas whitetailed deer, black bear, wild turkey, ruffed grouse, squirrels, hares, and foxes abound.

The future of the region's outdoor recreation resources is dependent upon the general conservation and development of its lands, waters, and forests. Sound multiple-purpose water resource developments can create outdoor recreation and fish and wildlife resources. Reforested land can provide timber, game habitat, campsites and hiking trails, watershed protection, and grazing for livestock. Comprehensive conservation measures which preserve and develop the potential of the land and water make life more pleasant for local residents and make the area more attractive for industry.

The Commission's program to develop the recreation potential of Appalachia, then, rests on a comprehensive program to conserve and develop certain of the region's basic natural resources and thereby to provide a base upon which local initiative can build more advanced recreational facilities. Specifically, this approach means to provide access into the region; to construct parkways and scenic roads opening and tying together major recreation resources within the region; to develop the water resources; to control stream pollution, silting, and streambank erosion; to maintain and improve wildlife habitat; to extend and develop publicly owned parks, recreation areas, and forests; to replant cutover forest lands; to restore denuded pasture lands; and to facilitate the development of onfarm income-producing recreational enterprises.

Although several of these objectives are treated elsewhere in the report, as part of water, timber, pasture, and minerals conservation, some basic conservation objectives are the primary responsibility of the outdoor recreation agencies of the States and the Federal Government.

The Commission recognizes the important role of the Bureau of Outdoor Recreation in the coordination of Federal and State outdoor recreation programs and in the preparation of comprehensive national and regional plans to develop outdoor recreation resources. Thus the

Commission is recommending enactment of the Land and Water Conservation Fund which will enable the Bureau of Outdoor Recreation to render major assistance to the States and local governments in recreational planning and development.

Parkway construction and operation is viewed as an integral part of opening access to the region. Thus, the Commission's program calls for an extension of parkway programs already underway or well advanced, and early consideration of other parkways, recreation areas, and scenic roads, which will be tied into the interstate and developmental road systems.

The public acquisition and development of areas primarily for outdoor recreation insure comprehensive conservation management and thus are an integral part of the basic natural resources program.

Because unwise strip mining ruins wildlife habitat and much coal mining destroys fish life by polluting streams with acid and alkaline drainage, a promising approach to restoration of the beauty and value of the lands and streams of Appalachia is to use the Federal grant-in-aid programs for fish and wildlife restoration. These programs are paid for by Federal taxes on guns, ammunition, and sporting goods, and by State hunting and fishing license fees. It appears that, without altering existing authority, Congress can appropriate money for the restoration by State fish and game commissions of fish and wildlife habitat destroyed by abandoned strip mines and by stream pollution from mine drainage. The Federal Government would pay 75 percent of the cost; the States 25 percent. Restoration work can be undertaken by the States on private lands if the owners agree to open them for public fishing and hunting.

Upon this physical base, the capitalization of the more sophisticated aspects of recreational touristic development can be undertaken. Hunting lodges, skiing centers, lake resorts, regional arts and crafts centers, tourist accommodations, and recreation farms specializing in fish and game crops—all are regarded as areas for private investment and initiative. Where necessary their establishment should be assisted by Federal, State, and local development units and the regional organization. And where necessary, access should be provided to long-term, low-interest financing.

Recommendations

1. Congress should give early consideration to the Land and Water Conservation Fund bill, H.R. 3846, which would provide financial assistance to the States and Federal agencies for planning, acquisition, and development of outdoor recreation areas, including those in Appalachia, to meet the present and future outdoor recreation needs of the American people.

2. Federal agencies responsible for the conservation and development of natural resources in the region should rapidly expand their regional programs for restoration of fish and wildlife habitat, development of basic resources for water-based recreation, and development of areas suitable for land-based outdoor recreation such as camping, hiking, and riding.

3. Congress should be asked to establish the Spruce Knob-Seneca Rocks National Recreation Area in West Virginia to be administered by the Forest Service, U.S. Department of Agriculture. The determination, selection, and establishment of other national recreation areas in Appalachia, based upon recently developed criteria, should be accelerated as much as possible.

4. An inventory should be made of existing private recreation facilities and of appropriate sites on private land for additional recreational enterprises and opportunities based on the needs for more developments as indicated by a market analysis. This could be part of the Bureau of Outdoor Recreation inventory of private lands under the nationwide plan.

5. Congress should be asked to give early consideration to all other parkway, recreation way, and scenic road proposals in the Appalachian region, provided they are coordinated in the planning stage with the Bureau of Public Roads, the National Park Service, the Forest Service, the States involved, and a study which the Bureau of Outdoor Recreation is currently undertaking on scenic roads and parkways.

6. The Department of the Interior should develop as rapidly as possible, in cooperation with the States and other Federal agencies, a proposal for augmenting the Federal grant-in-aid program for fish and wildlife restoration to reclaim abandoned strip mines and to control acid and alkaline mine drainage.

7. Consideration should be given to long-term-loan financing to groups of private landowners for the development and management of outdoor recreation enterprises within the region.

8. Area Redevelopment and other agency loan and assistance programs should be provided to encourage investments which can assist outdoor recreation development in Appalachia.

Human Resources

The programs of access and physical resource development proposed in the foregoing are validated only by the enlargement of hope and genuine opportunity they offer to this region's most valuable resource—its people. But programs must also be initiated which are focused more directly upon the people themselves.

The unmet needs of the people in Appalachia are primary—food, clothing, medical care, housing, basic education, skills, jobs, hope, dignity—and they are interrelated. The school lunch program encourages

attendance and assists scholarship. Adequate housing protects health. A decent job is necessary to the preservation of dignity.

The program recommended by the Commission to meet the human needs of the Appalachian people is concentrated within existing activities of the Federal, State, and local governments. With the exception of the health recommendation, we propose an expansion and acceleration of already authorized programs where known deficits exist in those funds available for Appalachia.

The President's poverty program is absolutely essential in meeting national deficiencies by providing additional, flexible resources. The vastness of the geographic area, the degree of past neglect, the absence of many of the most fundamental necessities of modern life warrant and require the focusing of additional attention and resources upon the Appalachian region.

TRAINING AND EDUCATION

An unfilled job is more than a man unemployed, it is an opportunity lost. The potential employee and his family remain at the survival level; the direct and the multiplied product of the employee are lost. Present opportunities are unfulfilled because qualified aplicants are scarce. And unless education, training, and retraining are intensified, tomorrow's opportunities, hopefully, in part, the result of the investments programs recommended in this report, will also be lost. This will require greatly increased expenditures in the whole field of training. The efforts of State and local government to increase its own spending will be to some extent frustrated by the inadequacy of the region's tax base. Federal expenditures must be increased if the problem is to become manageable.

Current proposals for Federal aid to primary and secondary education, if enacted, will provide substantial assistance for education in Appalachia in fiscal year 1965 and additional means to strengthen basic education in future years will have to be surveyed carefully. Supplementation is necessary, however, in the training and vocational education programs despite the increased Federal expenditures programed for 1965. The combination of too few vocational school buildings and a hostile terrain has seriously restricted the area effectively served by existing schools; a supplementation is needed in the construction provisions of the recently enacted Vocational Education Act.

An immediate effort should also be made to reduce the high incidence of illiteracy in Appalachia. Training programs for specific skills are inapplicable where the prospective trainee can neither read nor write. New amendments to existing training legislation permit heavy emphasis on the problems of illiteracy, but a special funding is essential to meet the region's greater needs.

The Manpower Development and Training Act, the Vocational Education Act, and the Cooperative Research Act should be supplemented in order to provide for in-service training of teachers, development of instructional materials, and demonstration and research projects.

VOCATIONAL REHABILITATION

Vocational rehabilitation opportunities for the mentally and physically disabled must be extended and improved through the provision of comprehensive vocational rehabilitation services, with special emphasis on physical restoration and other remedial services, as well as on prevocational and vocational training. The importance of this program in a region characterized by high-risk employment and poor health is obvious. Mining particularly has left its scars upon the men of the region. For all of these, the rehabilitation services offer a new opportunity to live a satisfying and productive life; this opportunity should be extended to greater numbers through a special appropriation.

EMPLOYMENT SERVICES

The effectiveness of these special as well as regular expenditures can be multiplied many times by a relatively small increase in employment services. Appalachia's relatively dispersed rural, nonfarm population requires special attention. The size of present staffs has prevented the services from doing much more than servicing claims for unemployment compensation. Emphasis has necessarily been on past problems rather than future oportunities. Counseling, guidance, registration, and placement, both for jobs and for training, will be possible only if the employment services within the region can be expanded significantly.

WELFARE SERVICES

The emphasis upon programs designed to broaden the future for many must not obscure the fact that for others, less fortunate, welfare assistance will be necessary. Community welfare resources need to be strengthened. The welfare services which form a part of the underpinning of satisfactory economic and social life, such as homemaker services, day care services for children, foster care and other child welfare services, and programs and centers for older persons, should be expanded within Appalachia. In addition, it should be recognized that financial support will always be necessary for many aged, disabled, and mothers with children; the levels of this support should be based upon reasonable measures of need.

Even here, however, the emphasis should be on constructive programs. More States should extend the aid to dependent children program to families where parents are unemployed, an extension

which should be coupled with a community work and training program. Under such a program, welfare recipients not only perform important community tasks which would otherwise go undone, but also they receive training and education which can become a bridge to more gainful employment. Special funds for demonstration programs and technical assistance should be appropriated. The enactment of S. 1803, providing $50 million annually for operation of work and training projects is also essential to encourage effective participation.

HEALTH

The region's shortcomings in training and in skills are matched by health and nutritional deficits. These needs warrant the initiation of several demonstration community health centers—including the construction and operation of fixed and mobile medical facilities, the hiring and training of personnel, the treatment of water and sewage, and pest control—in areas selected both with reference to need and to promise.

The regional health center would provide space for many health activities: maternal and child health, mental health, chronic diseases and communicable diseases. There would be diagnostic services as well as rapid screening for health defects. The center would include under one roof all personnel, records, laboratories, and conference and training facilities. Office space would be made available to encourage physicians and dentists to practice in the distressed area. Space for research personnel would be provided. Also, environmental health services would be programed and coordinated from the health centers.

NUTRITION

The nutritional problems of the region persist despite the dedicated efforts of State and Federal officials who administer the Federal school lunch and commodity distribution programs. Increased funds will be needed to permit the extension of the school lunch program to those schools not now participating. The commodity distribution program cannot, however, be corrected by simply adding additional funds. The very nature of the program restricts the variety of the foods distributed; as a result many suffer from a lack of certain essential nutrients. The food stamp program—which has operated in selected pilot counties in Appalachia—has demonstrated its basic merit in overcoming these deficiencies and should be expanded.

HOUSING

Health is also threatened, in many instances, by inadequate housing. In the case of the elderly and the disabled, this need may be met through an expansion of the Farmers Home Administration's program

of small grants to rural homeowners with severely restricted earning potential. But many in the region could afford to improve or replace their inadequate housing if adequate credit resources were available in the region. The need for additional credit resources is dramatically demonstrated by the oversubscription of the Farmers Home Administration's loan program for rural homeowners. Lack of funds forces a continual turning away of applicants with the result that substandard housing persists, suppliers' opportunities are diminished, and employment opportunities never come into existence. Swift adoption by the Congress of loan guarantee authority for Farmers Home Administration would do much to close the gap in rural areas, while amending the Federal National Mortgage Association Act (Fanny Mae) to provide special assistance for depressed areas would help to close the gap in communities larger than 2,500.

SUMMARY

This is but a partial catalog of the human needs of Appalachia. These needs are apparent; they can be measured both by slide rule and by the human eye. But the poverty they represent is not one of the spirit. The traditional rugged independence of the Appalachian people, although eroded in some areas, is still the base upon which any recovery program must be founded.

If their elemental needs can be met, these people will take whatever additional action is necessary to achieve full participation in the Nation's expanding economic drive. No single program can be devised to answer these fundamental requirements. Instead, a variety of programs must be brought into a coordinated attack. The "mix" will vary with the situation and must necessarily remain flexible, but the fact that only a greater concentration of resources focused on these needs can satisfy them is as apparent as the needs themselves.

When the details of the President's program on poverty are presented, many of the recommendations presented above for human resource development may be duplicated. The proposed "community action" section of the poverty program might contain all of the items listed above, with the exception of those relating to the construction of area vocational schools and the construction and operation of regional health centers.

To avoid any duplication of effort and to prevent any overlap in new programs to ease personal hardship, we recommend that such funds called for in the $71,000,000 request below be transferred to the new poverty agency. Thus the proposed new Appalachian regional organization would retain supervision of the initiation of the regional health centers and the construction of new vocational education facilities. The remainder of the human resources funds, which would

range between 30 and 35 million dollars, should be transferred to the poverty agency.

Request for fiscal year 1965 ..... $71,000,000

Community and Area Development

The foregoing recommendations cover the priority areas for public investment selected by the Commission. They will provide an immediate thrust in the drive to bring Appalachia to an approximately equal footing with contemporary America. They do not constitute a specific program for job creation but rather the public measures which must be undertaken if sufficient jobs are to be produced.

Beyond this framework, the task of development proceeds only with the vigorous and diligent involvement of the private individual, acting as both citizen and entrepreneur. The final purpose of the actions recommended in this report is to assist growth and development at the local level—to enable people to help themselves.

Despite the severity of the problems which face the communities of Appalachia, a substantial number of local groups in the region are engaged in highly successful community and area development programs. State government programs have provided significant new techniques and services to assist local development action.

The development process, to be fully successful, must be implemented by the best possible combination of Federal, State, and local programs of technical as well as financial assistance. Therefore, a prime function of the proposed new regional organization will be to serve as a center through which State and Federal agencies may best serve the actual process of local development. With the present section then, the Commission considers those developmental areas where the public and private effort meet, and where the exchange between them is the substance of economic growth.

INDUSTRIAL AND COMMERCIAL DEVELOPMENT

The private businesses of the Appalachian region are critical to future growth. They provide the means by which the potential of regional public investment is realized in the form of more and better jobs for the people who are the target of this developmental effort. The entrepreneurs who translate the capacities of the region's economy into first-level jobs are indispensable to economic growth. The availability of adequate developmental capital will be critical to their contribution.

Most local businessmen have traditional channels for credit when opportunities for growth are presented as a result of the regional developmental activities here recommended. These will include private equity capital, and private sources of short- and long-term credit.

But experience in the redevelopment of these areas clearly demonstrates that these will not be enough. Long-term developmental credit of the type offered now by the Area Redevelopment Administration and the Small Business Administration and by local industrial development corporations and State developmental authorities will be indispensable.

Of the 340 counties in Appalachia, 260 are eligible for Area Redevelopment Administration assistance, and of these 254 in whole or in part have approved overall economic development programs already functioning under the ARA program. This program has been a valuable beginning step in many communities and provides the basis for continuing progress. Moreover, the existence of so many of these sound, locally conceived development programs gives assurance that the programs recommended in this report will be fully utilized by developmental activities at the local level.

Much new economic activity in Appalachia will stem from the establishment and expansion of new small business enterprises. The Small Business Development Corporation program and the regular loan programs of the Small Business Administration are vital partners in this effort. The continuation and expansion of these programs will go a long way toward insuring that the new system of developmental highways will have their desired economic effect.

The Atomic Energy Commission has outlined the many benefits which may be realized in Appalachia from expanding peacetime nuclear technology. These range from the use of that technology in construction projects to the enhancement of Appalachian raw resources through irradiation. We urge the successor organization to this Commission to work closely with the AEC and the Southern Interstate Nuclear Board to insure speedy adoption, within Appalachia, of appropriate nuclear processes and practices.

Recommendations

1. Continue and expand the Area Redevelopment Act. Sufficient funds should be made available under the regular ARA program to provide increased technical and financial assistance to Appalachia and to improve the establishment and implementation of overall economic development programs by local leadership.

2. Continue and expand the Small Business Administration program.

3. Those State governments which have industrial development credit authorities should maintain and expand their ability to serve the needs of the Appalachian regions within their boundaries.

4. Those State governments which do not have industrial development credit authorities should consider their establishment.

5. Encourage the establishment of local industrial development corporations or comparable organizations.

6. Initiate a close liaison between the proposed Appalachian Regional Commission and the Atomic Energy Commission and the Southern Interstate Nuclear Board.

COMMUNITY DEVELOPMENT

Communities are growth points—but they are so only if resource development adjacent to them is matched by a development of the community itself so that it can beckon and accommodate growth.

The maxim is as valid for rural areas as for towns and metropolitan areas. The scope and nature of essential services and facilities will vary hugely between countryside, town and city; but each is a community of human beings with physical and social needs to be met. If they are not met, no amount of resource development alone can induce growth.

The lack of basic community services in some areas of Appalachia has been detailed in this report, and it is manifestly impossible to present here a catalog of all the needs in all the region's communities. The evidence is overwhelming that throughout Appalachia—in metropolitan areas as well as in towns and rural communities—a comprehensive approach to community programs and facilities must be undertaken encompassing such allied programs as subregional and urban planning, housing, zoning, water supply and disposal, control of stream and air pollution.

Elsewhere in America, provision of these facilities and services in recent decades has been a primary problem of growth; communities have been hard pressed to finance investment necessary simply to keep abreast of growth. But here again, in Appalachia, an investment from the other side of the coin is called for—the provision of facilities and services in order that growth may become possible. As the regional program gets under way, it is certain that existing State programs in community development will be strengthened.

A wide variety of Federal programs exist to assist this effort, and are coordinated through the Rural Areas Develoment program of the Department of Agriculture, by the Community Facilities Administration and Urban Renewal Administration of the Housing and Home Finance Agency, and by the Area Redevelopment Administration. Initiative by local residents both to identify their needs and to promote their community growth must be followed through with coordinated regional and subregional planning to avoid the frustrations of piecemeal development. The development of Appalachia's urban and rural communities must receive special attention if they are to contain the amenities which are necessary to induce growth.

Planning of this nature, it should be emphasized is not an interim, one-time event; but must be a continuous process designed to interrelate both immediate and long-term development.

If financing measures of the existing programs are inadequate to the peculiar challenge of the Appalachian situation, a realistic adjustment must be worked out: but this is only a single feature of the ground to be covered in a comprehensive, regionwide approach to this fundamental area where the private and the public sectors meet.