

J. Clark

**BOOM
TOWN
FINANCING
STUDY**

**VOLUME I. FINANCIAL IMPACTS OF
ENERGY DEVELOPMENT IN COLORADO - ANALYSIS
AND RECOMMENDATIONS**

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NOVEMBER 1976

BOOM TOWN FINANCING STUDY
VOLUME I. ANALYSIS AND RECOMMENDATIONS

Submitted to

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November 1976

"This Economic Adjustment Strategy was accomplished by professional consultants under contract with the Economic Development Administration. The statements, findings, conclusions, recommendations, and other data in this report are solely those of the contractors and do not necessarily reflect the views of the Economic Development Administration."

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SUMMARY

The Boom Town Financing Study report presents the results of an analysis of public sector financing and housing problems likely to be experienced by Colorado communities impacted by energy development projects (coal mines, electrical power generating plants, oil shale plants, and other synthetic fuel processing plants). The research effort did not deal with possible environmental or social impacts; it was limited to financial and housing needs of energy-impacted areas in the state.

Uniqueness of Energy-Impacted Boom Towns

Energy-impacted communities experience some of the same problems as any other rapidly growing area--private and public services often fail to keep up with demand, school facilities are taxed to capacity, housing is in tight supply and costly. However, energy-impacted areas have additional unique problems. They are usually sparsely populated areas with minimal public services and facilities. Financial resources to expand public facilities often are completely lacking; hence, vital facilities

such as water and sewer systems cannot meet the needs of new residents. The influx of new residents may overwhelm the existing population as growth rates exceed 10 percent annually. The economic base becomes specialized and highly dependent on one activity--energy development.

One additional unique characteristic of energy-impacted boom towns deserves mention. The development of energy resources is site-specific. An energy industry must go where the natural resources are located--there are very few if any alternative locations. This is a different situation than one where growth is induced by a government installation, a large manufacturing plant, or by the relocation of a corporation headquarters.

Major Findings

Of the three types of local government analyzed (municipalities, counties and school districts), municipalities generally have the least ability, or financial resources, to adequately provide needed public services and facilities on a timely basis. The problems facing municipalities are primarily due to a large expected influx of new residents without a corresponding increase in the tax base.

It is legally possible for various units of local government to share tax base and revenue resources, but it is not being done to any extent in Colorado at the present time. The need for tax base and revenue sharing exists between municipalities and counties, and between adjoining counties.

No readily available and timely sources of financial assistance for energy-impacted areas exist in Colorado. Some funds have been appropriated by the Colorado Legislature from the Oil Shale Lease Fund for use in northwestern Colorado. However, most of the immediate needs relate to coal development. There appears to be a need for about \$50 million in available funds which can be used, normally on a loan basis, for local government entities facing front-end financing problems as a result of energy development.

Problems likely to be experienced by a community or local area impacted by large scale energy development are so numerous and complex that outside

technical and financial assistance will be required. Such assistance is in part available in state government; however, sources of technical assistance are fragmented, and those having the technical expertise often do not have ready access to needed funding.

There is an urgent need for up-to-date, comprehensive contingency plans at all levels of local government. Local government officials are faced with a tremendous amount of uncertainty relative to the timing and magnitude of energy development. They are criticized for failure to anticipate new impacts, but often lack the basic data (e.g., accurate employment estimates, construction schedules) to develop such plans. Local officials seldom have the financial support to carry out a comprehensive financial analysis of various alternatives.

Most energy-impacted communities will have an immediate need for sizable quantities of temporary housing for construction workers. The financing of mobile home pads may not represent an attractive investment opportunity because of high costs and uncertainty of the duration of demand. Further, physical appearance of most mobile home parks is a problem in many areas in the Rocky Mountain Region. Nevertheless, mobile homes still offer the most practical solution to the temporary construction worker housing problem.

The risks involved in providing large quantities of mortgage money in energy-impacted areas is a matter of concern. The demand for funds is likely to outstrip local commercial bank and savings and loan resources. Experience has shown that escalating housing costs severely limit the portion of the market that can qualify for mortgage financing.

Major Recommendations

- I. Develop a system and criteria for identifying areas likely to experience adverse short term socio-economic impacts from energy development.
- II. Create an Energy Impact Assistance Fund to provide front-end financing for energy-impacted areas in the state.

- III. Establish an Energy Impact Financial Assistance Office in the Department of Local Affairs to provide financial and technical assistance to energy-impacted communities and areas.
- IV. Institute a mandatory system of tax base sharing in those Colorado regions most likely to experience serious socio-economic impacts from energy development.
- V. Make direct grants to energy-impacted communities for the purpose of developing and updating detailed contingency plans in anticipation of public sector financial and housing needs.
- VI. Develop a comprehensive state energy policy, with special emphasis on socio-economic impacts, financing of public services and facilities, and equity of financial burden.
- VII. Participation by the **c**ouncils of government in the establishment of **l**ocal energy impact committees, and assist in local planning efforts.
- VIII. Develop a comprehensive national energy policy, particularly with reference to synthetic fuel development.
- IX.
 - A. Stimulate the traditional housing industry to meet the need for temporary and permanent housing.
 - B. Maximize the use of federal, state and local government housing programs.
 - C. Involve energy firms in providing housing, especially for employees.

The development of Colorado's energy resources can be accomplished with minimal social and economic dislocations if adequate attention is given to front-end financing and housing needs. The implementation of the Boom Town Financing Study's recommendations will facilitate this process.

INTRODUCTION

The Boom Town Financing Study was made possible by a grant from the Economic Development Administration (EDA), U.S. Department of Commerce. The grant was funded under Title IX, Section 903 of the Public Works and Economic Development Act of 1965, as amended. As stated in the EDA grant, the purpose of the study is to examine methods of financing the cost of needed public facilities and services in areas experiencing unusual sudden growth due to energy resource development. The study was administered through the Colorado Department of Local Affairs, Office of Rural Development.

Objectives of Study

The primary objective of the Boom Town Financing Study (BTFS) was to research and develop recommendations for ways of funding capital improvements, public services, and housing in communities likely to experience rapid growth by fossil fuel development.

Although the research and recommendations relate to Colorado, it is intended that they be applicable to other states facing similar problems. The methodology and data developed in the course of this study may also be useful to researchers and others analyzing socio-economic impacts of energy development.

An additional objective of the study was to provide an avenue for representatives of the private and public sectors to work together in arriving at acceptable solutions to public sector financing and housing problems likely to come about in rapid growth situations.

Scope of Study

The study was limited to analysis of alternatives for dealing with public sector financial impacts and housing needs in communities likely to experience impacts from large scale fossil fuel development. It was beyond the scope of the study to analyze environmental, social or a broader range of economic impacts normally associated with rapid population growth situations.

Methodology

The primary working components of the study included a full time administrative and research staff of three people, two committees appointed by the Governor, and an economic research firm.

The Governor's Advisory Committee, composed mainly of private sector financial experts, developed the actual recommendations for alternative methods of providing front-end financing, and for dealing with potential housing problems. It developed the analysis and recommendations through a series of working meetings conducted over a six month period.

The Governor's Resource Committee included department and division heads of state government and a representative from the U.S. Economic

Development Administration. This committee worked closely with the staff and periodically attended meetings of the Governor's Advisory Committee. The specific knowledge and expertise of various state government entities was instrumental in developing the study concepts.

The economic research firm, Bickert, Browne, Coddington & Associates, Inc., provided a quantitative analysis and estimates of public sector financial and housing needs in six selected communities in western Colorado. The results of their research are published in Boom Town Financing Study, Volume II, Estimates of Public Sector Financial Needs, Six Western Colorado Communities.

The staff, Ross M. Bolt, Jr., Project Coordinator, Lynda A. Watkins, Research Specialist, and Dan Luna, Housing Specialist, provided administrative support for the study, conducted preliminary research, developed background data for the Governor's Advisory Committee, and prepared the final report.

Near the conclusion of the study, the staff visited 10 communities in Regions 10 and 11 to discuss the preliminary recommendations with government officials, community leaders and other interested parties. Their advice and suggestions were taken into consideration in finalizing the recommendations of the study.

Acknowledgments

The initiation, development and completion of the Boom Town Financing Study was dependent upon the assistance and involvement of many people and agencies in the state. The unique contributions of everyone who participated in the project are appreciated. The Governor's Advisory Committee was the key group that analyzed the problems and developed recommendations.

Committee membership included:

Donald J. Horst, Vice President
Trust Department
Central Bank and Trust
Chairman

Dean Boedeker, President
Kirchner Moore & Company
Vice Chairman

Bruce Alexander, President
First National Bancorporation, Inc.

Thomas A. Arnold, Director
Planning and Development
Denver & Rio Grande Western Railroad Co.

Robert G. Boucher, President
First Denver Mortgage Company

William T. Guy, Staff Director
Western Governors Regional Energy Policy Office

Ken Johnson, Publisher
The Daily Sentinel, Grand Junction

William D. Johnson, President
Colorado Federal Savings & Loan

William J. Meurer, Partner
Arthur Andersen & Co.

Thomas W. Ten Eyck, Vice President
Community Government & Public Affairs
Rio Blanco Oil Shale Project

Within state government, the Governor's Resource Committee was helpful in coordinating the study with other efforts aimed at decreasing social and economic impacts of energy development. Betty Miller, Executive Director of the Department of Local Affairs; F. Kenneth Baskette, Rural Development Coordinator; and J.D. Arehart, Executive Director of the Division of Local Government were particularly helpful in the formulation of study concepts and completion of the final report. Other members of the committee were Burman Lorenson, Socio-Economic Impact Coordinator;

Lyle Kyle, Director of the Colorado Legislative Council; Wallace Pulliam, Principal Analyst for the Council; and George Del Fuoco, Coordinator for the U.S. Economic Development Administration.

The staff wishes to acknowledge the assistance of the economic research firm, Bickert, Browne, Coddington & Associates, Inc., especially Dean C. Coddington, Harry I. Zeid, Dennis W. Donald, Jefferson Patterson, Susan Nygren and Joyce McCorkle. BBC was assisted by Ronald C. McLaughlin, President, Wright & McLaughlin Consulting Engineers.

Within the Department of Local Affairs, Linda Hinchey, Barbara Johnston, Cornelia Ribis, John Quigley and Chris White all provided staff support.

SECTION I. BACKGROUND, BOOM TOWN FINANCING PROBLEMS

National Energy Needs

In recent years, the United States has experienced problems involving energy resources, the amount and type of energy used, and wasteful uses of energy.

The United States, which uses one-third of the world's total energy consumption, relies most on its least plentiful domestic energy resources and least on its most abundant ones. Coal, our most plentiful fossil fuel currently supplies less than 20 percent of our energy needs. Uranium, which has a domestic energy potential even larger than coal, provides only two percent of our energy. The contribution of solar energy is negligible.*

As domestic supplies of oil and gas have continued to dwindle, our use of them has steadily increased. In just over 20 years the United States

*Energy Research & Development Administration, Creating Energy Choices for the Future, A Summary of the National Plan for Energy Research, Development and Demonstration, 1976, p. 4.

reversed its role as a net exporter of energy and now imports 15 percent of its total energy and 37 percent of its petroleum.*

In an effort to deal with this situation, the objective of "energy self-sufficiency" has been the subject of numerous national studies. Even partial realization of this objective will accelerate energy development activities in the Rocky Mountain Region and especially in Colorado. The state is particularly rich in coal and oil shale resources. There are 230 billion tons of coal in place which is 10 percent of the nation's total. The Piceance Creek Basin in northwestern Colorado contains 600 billion barrels of higher grade oil shale with in-place oil resources equal to 1.25 trillion barrels of oil equivalent. This is equal to a 100 year supply of oil for the nation, at present rates of consumption. Other significant resources are oil, gas and uranium. In 1974, Colorado ranked 11th in the U.S. in oil production and fourth in production of U308 "yellowcake" (uranium).**

The Boom Town Phenomenon

The development of energy resources to meet national needs can have some positive effects on a local economy--increased employment, in-migration of skilled labor, and expansion of the local economic base. These benefits are long range and regional. However, there are also some inimical effects--the greatest of which is generally referred to as the boom town phenomenon. These negative impacts tend to be immediate and local.

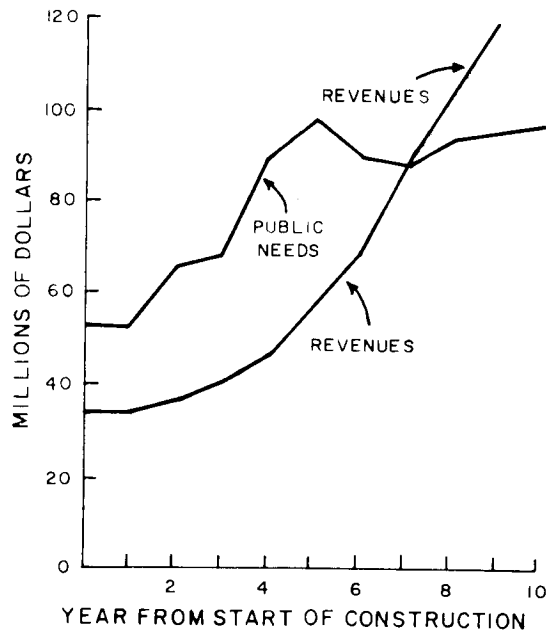
The boom town phenomenon is usually caused by a rapid increase in population in an area where both public and private facilities and services are not adequate to accommodate such an increase. The timing and the geographic distribution of tax revenues lead to severe front-end financing

*Federal Energy Administration, 1976 Executive Summary, National Energy Outlook, U.S. Government Printing Office, Washington, D.C., 1976, p. 3.

**Compiled by D. Keith Murray, Mineral Fuels Section, Colorado Geological Survey, Energy Resources of Colorado: Facts and Figures, July 31, 1975, pp. 1 and 5.

problems. Past studies have estimated a lag time of from five to eight years between public expenditures and future realized revenue uses:*

ILLUSTRATION OF LEAD TIME PROBLEM**



New taxes (or revenues) from an energy project often go to the county and/or the state, while the major impact occurs in the communities where the people live and require public facilities and services. An energy project can also be located in one county, while the community where workers and related service people live may be in another county or even another state.

The Rocky Mountain Region, and Colorado in particular, is replete with examples of the boom town phenomenon. The ghost towns of the gold and silver rush of the 1800's can still be found in the mountainous areas of the region. One bystander of the earlier "boom" period said "from a lone cabin, Leadville (Colorado) became a village in a night, a town in a week, a

*In particular, Colorado Geological Survey, Tax Lead Time Study for the Oil Shale Region, 1974.

**Ibid., p. 31.

city in a month and a booming metropolis in a year."* By 1880, there were 40,000 to 50,000 people in Leadville. In 1970, the population was 4,314.**

Today, in the west, the boom town phenomenon has had a rebirth with the development of energy and power generating facilities. Several communities in the region have experienced problems associated with rapid population growth due to large scale energy development. The population of Rock Springs, located in Sweetwater County, Wyoming, increased at a rate of 20 percent per year between 1971 and 1974.*** The economic, social, housing, and public sector problems associated with this surge of growth have been widely publicized. The bibliography at the end of the report identifies a number of studies dealing with recent boom towns in the Rocky Mountain Region.

Within Colorado, the Craig area in Moffat County has already experienced rapid population growth due to energy development projects--opening of coal mines and construction of a 780 megawatt coal-fired power plant. In 1970, Craig was a quiet, stable town of 4,205 people. Next year (1977) the population is projected to peak at 12,123,**** a 288 percent increase in seven years. In a recent speech the Mayor of Craig, Doyle Jackson, described what such an increase in population means to a community.

In a community where rapid growth requires all available resources to be directed at basic services, subsequent problems result which are lumped into what is now known as the 'Boom Town Syndrome.' Educational services, recreational facilities, and other systems are all attacked and all suffer from the inability to perform adequately

*Carl Akers, Carl Akers' Colorado, 1975, p. 36.

**U.S. Bureau of the Census, Current Population Reports, Population Estimates and Projections, April 1975, p. 4.

***Bickert, Browne, Coddington & Associates, Inc., "An Analysis of Jim Bridger 4 Power Plant Impacts," prepared for Pacific Power & Light Company, October 1975, p. 8.

****Town of Craig, "Moffat County-Craig Capital Improvement and Development Program," March 27, 1976, p. 14.

in meeting the demand of the populace. This, in turn forces a decline in quality. Lack of and/or poor quality services and amenities in turn result in upswings in crime, alcoholism, suicides and suicide attempts. Social problems and negative signs of urbanization (congestion, higher prices, and fear) contribute to feelings of alienation and loss of the old, better way of life. The highest toll extracted from boom towns is the literal destruction of a community which has in the past sustained and nurtured its people. The decline in the quality of life has stolen a community from its people.*

While the problems experienced in Craig are not as severe as those in Rock Springs, they are of sufficient magnitude to focus the attention of Coloradans on a serious potential problem; that is, achieving orderly community development when energy resources are commercialized. Referring to this situation, Governor Lamm made the following statement.

Our efforts should be directed toward maximizing the individual human benefit while assuring the proper balance between man and nature. This balance will be increasingly tested should uncoordinated growth be allowed to continue indefinitely. We must strive to promote an ethic of stewardship and conservation of our natural resources and our environment in citizens and visitors alike:**

In summary, energy boom towns in the Rocky Mountain Region have tended to exhibit the following characteristics:***

- (1) Relatively small population base, usually under 50,000.
- (2) Isolation from larger cities or metropolitan areas.
- (3) Population growth rates in excess of 10 percent annual for at least two consecutive years.

*Prepared statement by Doyle Jackson, Mayor of Craig, Colorado, presented to the Legislative Finance Committee, September 20, 1976.

**Office of the Governor, Executive Order, "Goals and Objectives for Colorado's Long-Range Growth and Development," September 1976, p. 2.

***This summary of boom town characteristics was derived from a number of sources including John S. Gilmore, "Boom Towns May Hinder Energy Resource Development," Science, February 13, 1976, pp. 535-540; and an internal paper prepared by the staff of the Governor's Socio-Economic Impact Coordinator, September 1976.

- (4) A shift in the mix of basic economic activity away from traditional, more stable sources (e.g., agriculture, trade, services) into construction and operational employment related to energy development.
- (5) Housing demand, both for permanent and temporary housing, quickly exceeds the supply; prices increase substantially.
- (6) The incidence of social problems, such as burglary, vandalism, truancy, dropping out of school, child abuse, alcoholism, depression, divorce and the demand for welfare, increase at rates far above the rate of population increase.
- (7) Deterioration of the quality of life. In the private sector, prices may increase, retail outlets and services may become overcrowded, and medical services are likely to be strained. In the public sector, public services and facilities (recreation, streets, water, sewer) fail to keep pace with population growth. Public sector financial problems, particularly at the municipal level, become severe.
- (8) Employee turnover increases and productivity drops.
- (9) In the early stages of growth, there is a lack of planning or concern over growth management.
- (10) There is usually uncertainty as to the magnitude and permanence of energy projects and, hence, their social and economic impacts.

Scoping the Problem

One of the first tasks undertaken by the Boom Town Financing Study staff and the Governor's Advisory Committee was to attempt to define the scope of the problem within the limits of the study effort. The staff reviewed and analyzed pertinent literature in the field and developed a preliminary information base. Using these data as a starting point, the staff and the Advisory Committee met at regular work sessions to discuss and further define the issues.

The result of the Committee's initial deliberations was to limit the scope of the inquiry to front-end financing problems likely to be experienced by

municipalities, counties and school districts in energy impacted areas. It was the opinion of the Committee that housing needs, although not generally considered a public responsibility, will be of such magnitude as to require some government involvement and therefore were included. Large scale energy development in Colorado will occur, for the most part, in remote, sparsely populated rural areas with little or no private housing capital markets. The risk to the developer is great. Therefore, special stimuli or incentives to reduce the risk will be required to assure development of needed housing. There will also be special impact problems associated with provision of temporary/construction worker housing.

The Economic Development Administration (EDA) grant excluded in-depth analysis of the many environmental concerns and social or quality of life factors which are extremely important in conducting a total assessment of the likely impacts of rapid energy development on Colorado communities. Although the study focused on fiscal impacts, environmental and socio-economic concerns were given consideration in defining the issues and developing recommendations.

The Advisory Committee and staff also decided to utilize a field-based method of researching the likely front-end financing and housing problems associated with current and projected boom town development. The purpose of these case studies, involving six Colorado communities, was to develop estimates of likely impacts in specific situations rather than trying to generalize based on experiences in Montana, Wyoming and other states.

Establishing Priorities of Public Facilities

In order to further limit the scope of the study to manageable proportions, it was also agreed that public financing should be available to at least maintain the present or pre-existent quality of life. To a certain extent, the quality of life in a community can be measured by the adequate or inadequate provision of essential public facilities and services. This was thought to be a reasonable limit to insure that the study did not attempt to provide recommendations for financing any and all community needs

other than those most critical ones directly resultant from the impact of energy development.*

The Advisory Committee then reviewed a list of public facilities typically available in a community, county and school district in Colorado. From this list, it selected 12 types of facilities which it thought were high priority, or those most acutely impacted by rapid population growth.

These were:

- (1) fire protection
- (2) law enforcement
- (3) water
- (4) sewage treatment
- (5) solid waste collection and disposal
- (6) hospital and medical facilities
- (7) detention facilities
- (8) juvenile treatment and custody facilities
- (9) county and municipal courts
- (10) classrooms and other education facilities at the primary and secondary levels
- (11) recreational facilities
- (12) administrative space

Issues to be Resolved

After initially reviewing boom town financing problems, some major issues emerged:

- (1) What is the magnitude of the front-end financing problem in energy-impacted areas in Colorado?

*In practice, as the estimates were developed in each of the case study areas, it became difficult to apply these standards to all cases. This was particularly true in the very small communities studied where there are likely to be substantial increases in population and much greater needs for public facilities and services than presently exist. In addition, some of the communities analyzed have facilities (particularly in the water and sewer categories) that are operating well below state standards at the present time.

- (2) Where is front-end financing available?
- (3) What mechanisms will facilitate front-end financing?
- (4) How can front-end costs be repaid? Or should they be repaid?
- (5) How can the burden of associated costs of energy development be equitably distributed?
- (6) How can increased public revenues resulting from energy development be allocated to the public entity where the major impacts occur?
- (7) When does a community become a boom town?
- (8) What are the appropriate levels of government (federal, state and local) to deal with specific elements of the boom town financing problem?
- (9) What unit of local government is likely to have the greatest financing needs and problems?
- (10) How can public and private plans be coordinated?

In the housing area, the following issues were thought to be of central importance:

- (1) Who is responsible for providing housing for construction workers? Permanent employees? Local service workers?
- (2) How can the financial risk be reduced to lenders and builders?
- (3) What will attract quality builders to an energy-impacted area?
- (4) How can adequate housing be made available in energy-impacted communities on a timely basis?
- (5) How can sufficient quantity and quality of mobile home pads be provided? How can they be financed? How can pads be reclaimed after they are no longer needed?
- (6) How can a community tap the public programs available to assist in housing?
- (7) How can the high costs of providing housing be dealt with?

SECTION II. SIX CASE STUDIES - OVERVIEW

Identifying Areas for Case Studies*

Many communities in Colorado can expect to be impacted by energy development--Hayden, Craig, Meeker, Rangely, Rifle, DeBeque, Grand Junction, Glenwood Springs, Carbondale, Paonia, Hotchkiss, Battlement Mesa (a proposed new town), Brush, Fort Morgan, Walsenburg, Trinidad, and the Denver Metropolitan Area. Boom town financing problems are not uniform from community to community. The extent and severity of the problem will vary depending on given circumstances in each community. Among the major variables present in different communities are: present population size; type and number of energy developments; rate of population growth; level of unemployment; location of tax base versus area of need; adequacy of local services and facilities; and quality of planning.

*Supporting data and analysis for Section II are contained in Tables A-4 through A-9 of the report prepared by Bickert, Browne, Coddington & Associates, Inc., "Boom Town Financing Study, Volume II, Estimates of Public Sector Financial Needs, Six Western Colorado Communities," July 1976.

Six case study communities--Battlement Mesa, Craig, DeBeque, Grand Junction, Paonia, Rangely--were selected because they represent a broad diversity of size, growth prospects, available public services and facilities, financial structure, location and likelihood of fossil fuel development. They vary in size from the non-existent proposed new town of Battlement Mesa to the regional trade center of Grand Junction (26,500). The smallest community, DeBeque with 275 people, has one part-time policeman and an annual operating budget of \$40,000. Grand Junction, by contrast, offers all major urban services and has an annual budget of \$9.5 million.

From a locational point of view, Rangely is near the Utah border and is likely to experience special impact problems if two oil shale tracts in Utah are developed. DeBeque and Battlement Mesa are located along Interstate 70 and have excellent access to larger towns. Paonia is somewhat isolated being located 30 miles from Delta and 51 miles from Carbondale via McClure Pass. The locations of the six case study communities and their counties are shown on Figure 1. Figure 2 shows the impacted school districts. A brief description of the communities follows:

- (1) Craig is already impacted by construction of the Yampa Project, a 780 megawatt power plant, and future impacts are anticipated from coal mining and additional power plant construction.
- (2) Rangely is impacted, to a moderate degree, by oil and gas production. Potential sources of energy impacts include three oil shale projects, a power plant, and coal mining.
- (3) DeBeque is a small community located near the Occidental petro-experimental oil shale site.
- (4) Grand Junction is the regional trade and service center for western Colorado and portions of eastern Utah. Although it is located some distance from major coal, oil shale and uranium deposits, the area is expected to be heavily impacted by workers commuting to mine and plant sites. Development of technical

FIGURE I. LOCATION OF THE SIX CASE STUDY COMMUNITIES

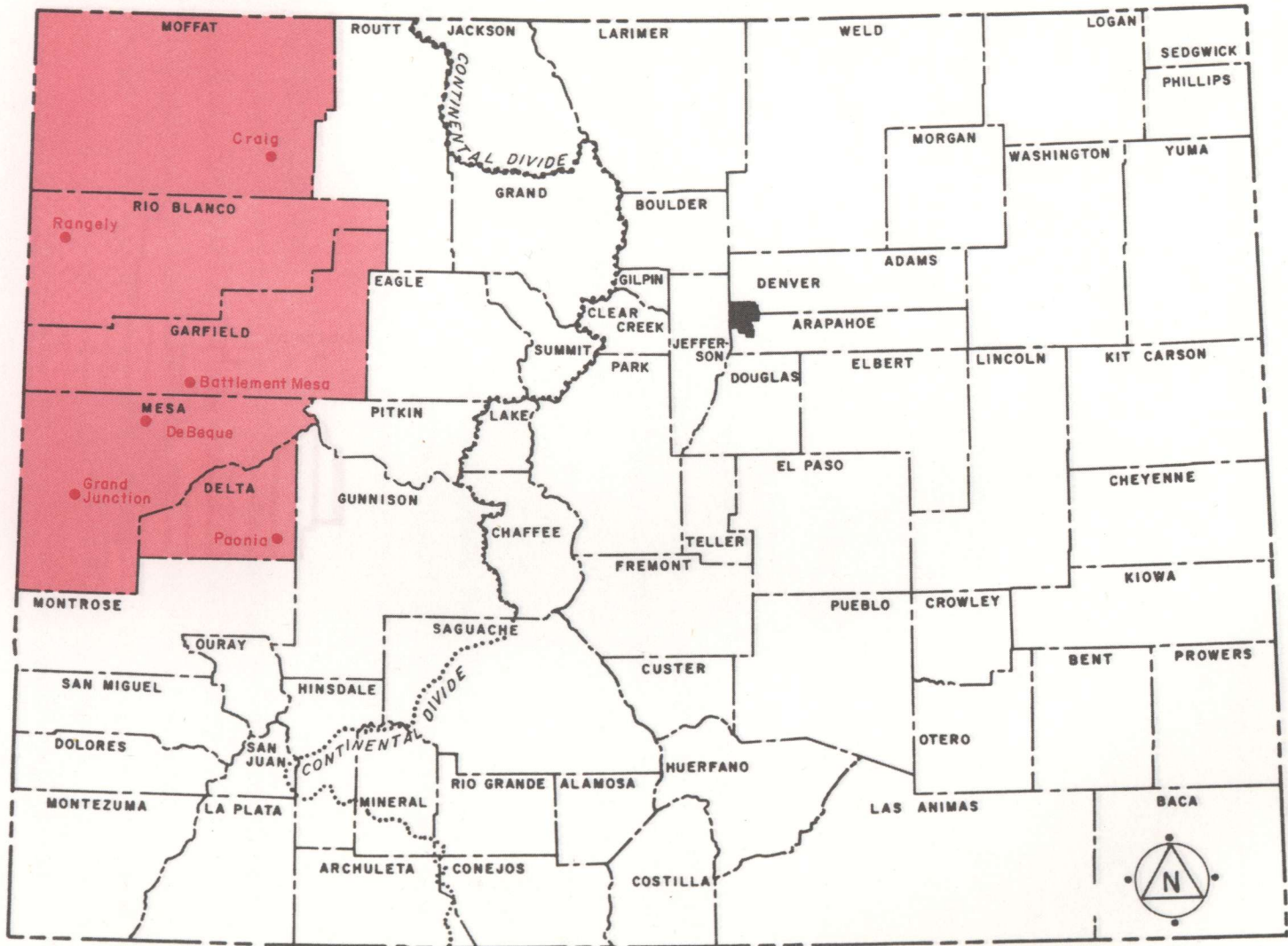
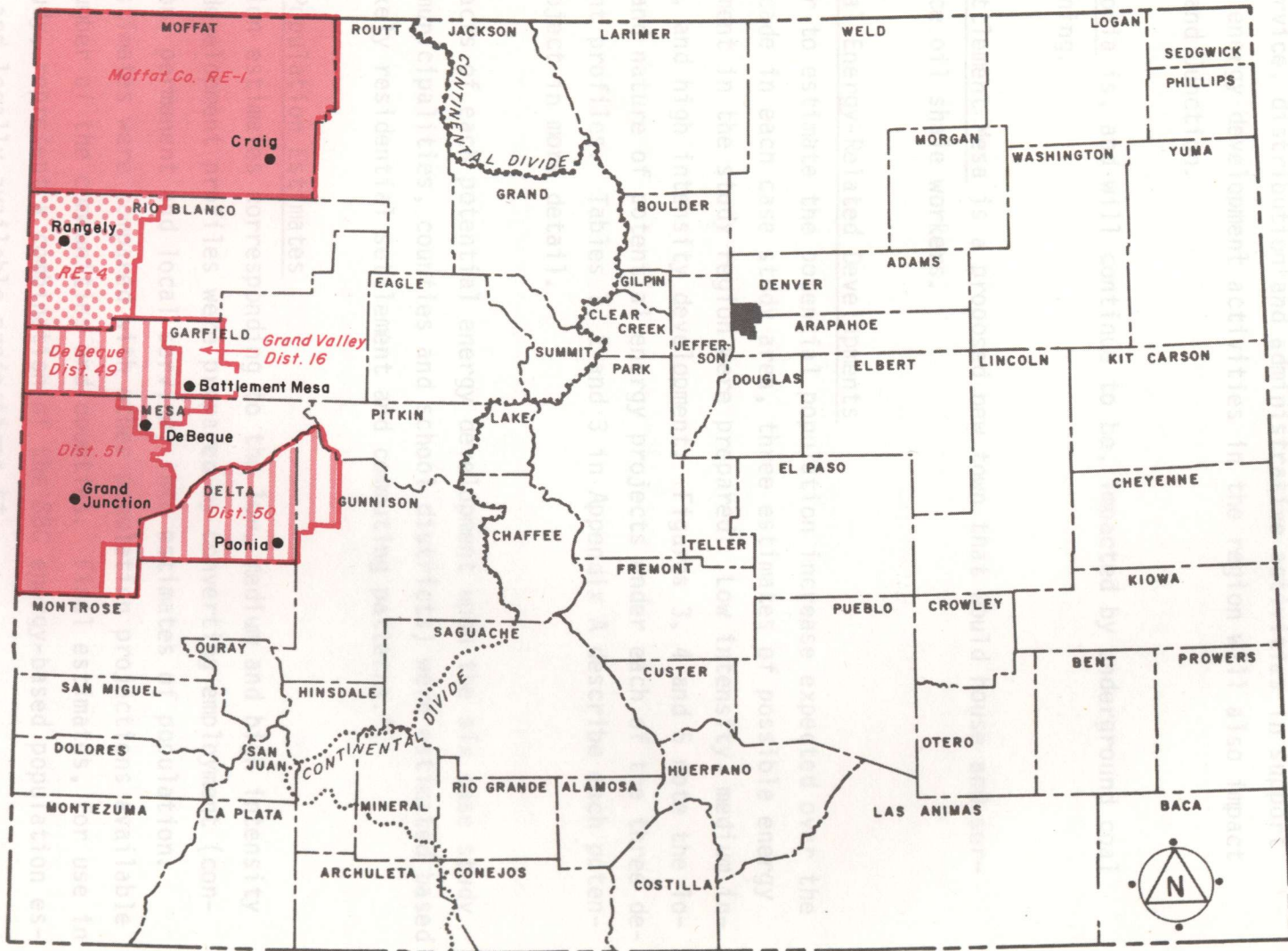


FIGURE 2. CASE STUDY COMMUNITIES AND SCHOOL DISTRICTS



service, distribution and administrative activities in support of energy development activities in the region will also impact Grand Junction.

- (5) Paonia is, and will continue to be, impacted by underground coal mining.
- (6) Battlement Mesa is a proposed new town that would house and service oil shale workers.

Potential Energy-Related Developments

In order to estimate the potential population increase expected over the next decade in each case study area, three estimates of possible energy development in the study region were prepared: Low intensity, medium intensity, and high intensity development. Figures 3, 4 and 5 note the location and nature of potential energy projects under each of the three development profiles. Tables 1, 2 and 3 in Appendix A describe each potential project in more detail.

The impacts of each potential energy development upon the six case study areas (municipalities, counties and school districts) were estimated based upon likely residential settlement and commuting patterns.*

Future Population Estimates

Population estimates corresponding to the low, medium and high intensity energy development profiles were prepared by converting employment (construction, permanent and local service) into estimates of population. These estimates were compared with other population projections available for a number of the communities and counties. Final estimates, for use in this study, represent a combination of the BBC energy-based population estimates and locally available projections.**

*Ibid.

**Ibid., Table A-12.

Table 1 summarizes the future population estimates used in estimating public sector and housing needs in the six case study areas over the next decade. Population increases in all six communities range from 13,350 under the low development profile to 48,400 in the high intensity profile. These increases compare with a present population base of 36,900 in the six case study communities.

Public Sector Revenue and Operating Expenditures

The primary purpose of analyzing the six case study areas was to determine potential public sector financial impacts.

Revenue estimates for the peak year (normally 1985) are based upon (1) estimates of assessed valuation, (2) estimates of retail sales, and (3) estimates of a wide variety of other revenue sources.*

Operating expenditures were based upon an analysis of present expenditure patterns and future needs caused by rapid population growth.**

Table 4, Appendix A, compares revenues and operating costs for each community under the low, medium and high population estimates. Two possible adjustments in revenue sources to bring revenues and operating expenditures into balance in the cases of Rangely and Battlement Mesa are also shown in Table 4. Tables 5 and 6, Appendix A, present similar comparisons for the five counties and six school districts included in the case studies.

In general, municipalities are expected to be able to adequately finance operating expenses under all three development profiles. The one exception is Rangely, but even there the shortfall is slight. Among the counties, Mesa is expected to experience difficulties in meeting operating costs with the projected growth. Three school districts--Rio Blanco RE-4, Mesa County 51 and Delta County 50--may experience financial problems because of energy related growth, given present mill levy rates.

*Ibid., Tables C-1 through C-11.

**Ibid., Tables B-1 through B-9.

FIGURE 3. MAJOR ENERGY-RELATED PROJECTS LIKELY TO IMPACT ONE OR MORE OF THE CASE STUDY AREAS, 1976 TO 1985 (LOW INTENSITY DEVELOPMENT)

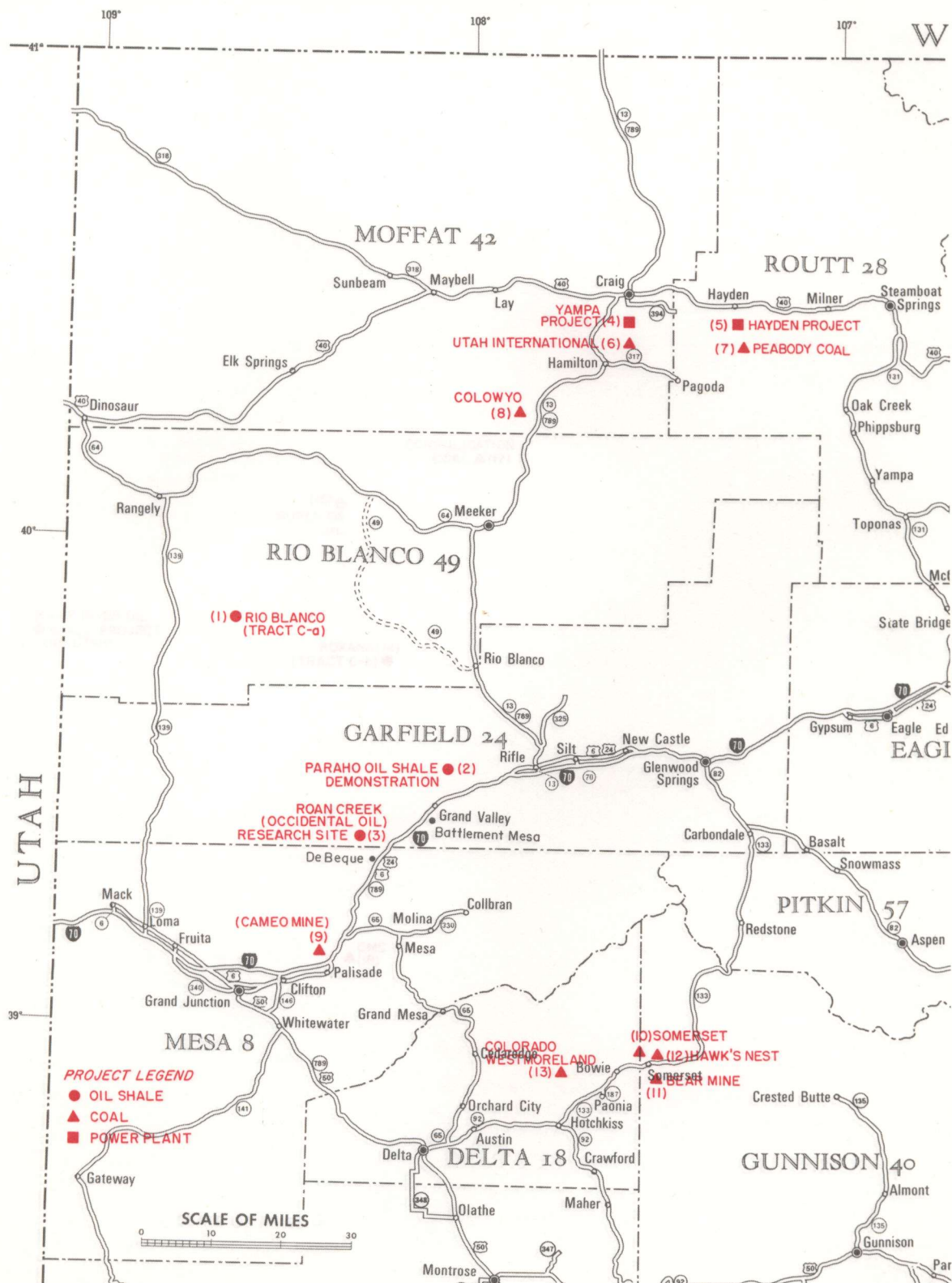


FIGURE 4. MAJOR ENERGY-RELATED PROJECTS LIKELY TO IMPACT ONE OR MORE OF THE CASE STUDY AREAS, 1976 TO 1985 (MEDIUM INTENSITY DEVELOPMENT)

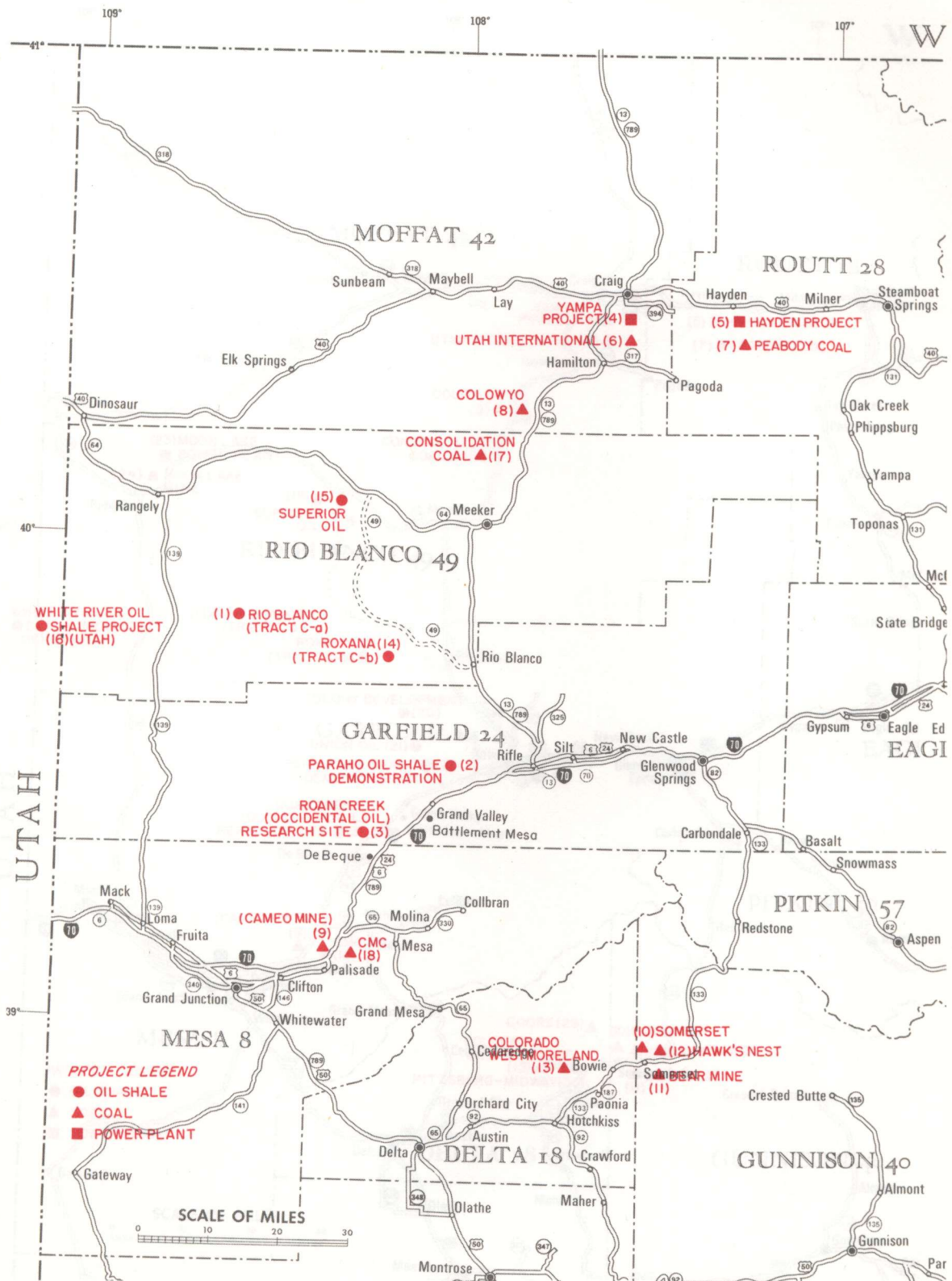


FIGURE 5. MAJOR ENERGY-RELATED PROJECTS LIKELY TO IMPACT ONE OR MORE OF THE CASE STUDY AREAS, 1976 TO 1985 (HIGH INTENSITY DEVELOPMENT)

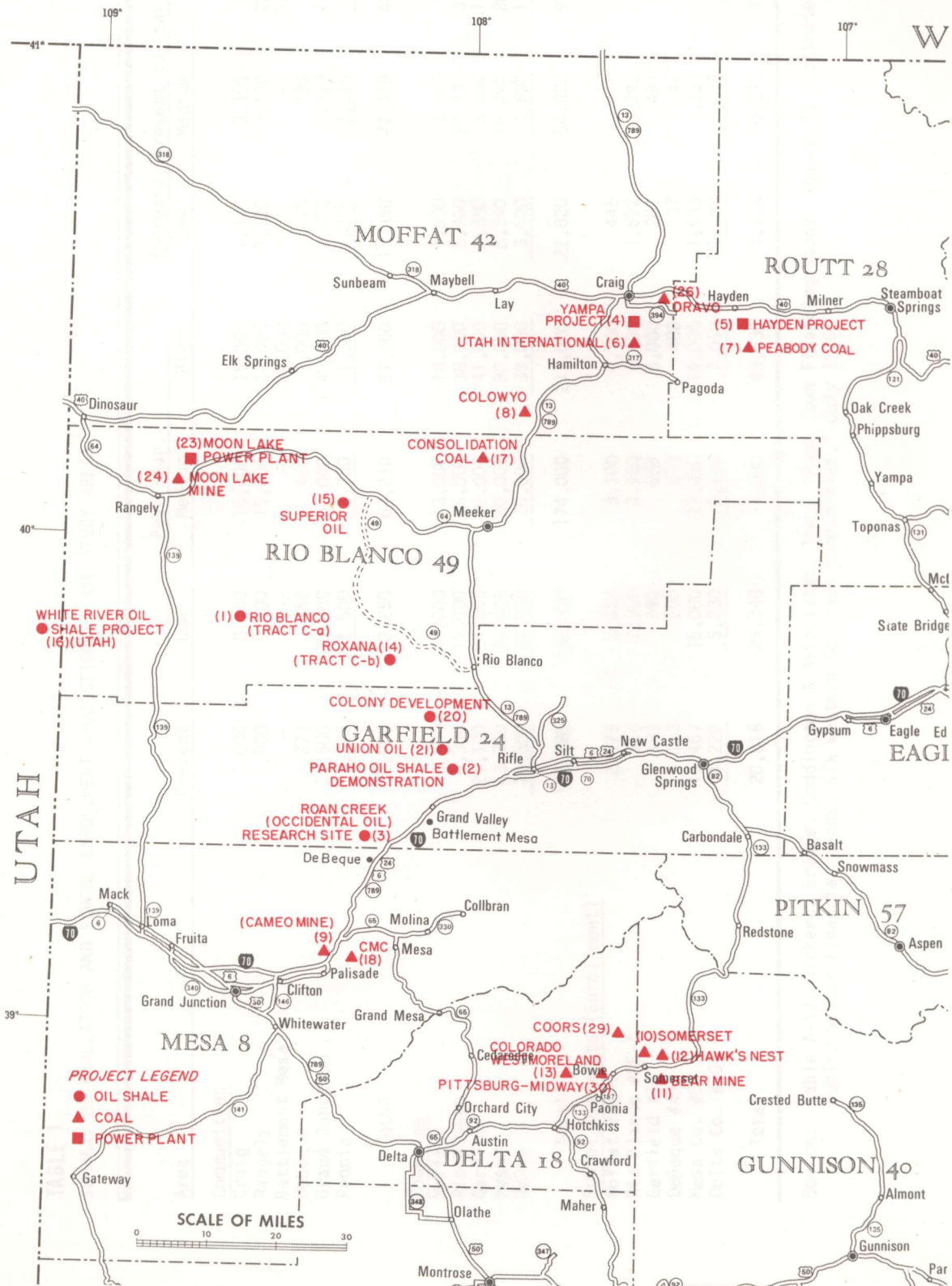


TABLE 1

SUMMARY OF POPULATION AND SCHOOL ENROLLMENT PROJECTIONS, CASE STUDY AREAS

Area	Present	Peak Year			Increase, Present to Peak Year		
		Low	Medium	High	Low	Medium	High
<u>Communities</u>							
Craig	7,000	8,300	10,000	15,000	1,300	3,000	8,000
Rangely	1,900	9,000	15,000	24,000	7,100	13,100	22,100
Battlement Mesa	--	--	--	12,000	--	--	12,000
DeBeque	275	450	460	1,000	175	185	725
Grand Junction	26,500	30,000	35,000	40,000	3,500	8,500	13,500
Paonia	1,225	2,500	3,750	5,300	1,275	2,525	4,075
Total	36,900	50,250	64,210	97,300	13,350	27,310	48,400
<u>Counties</u>							
Moffat	9,500	11,000	13,000	18,000	1,500	3,500	8,500
Rio Blanco	6,300	15,000	25,000	38,000	8,700	18,700	31,700
Garfield	21,120	24,000	30,000	41,000	2,880	8,880	19,880
Mesa	63,760	70,000	80,000	90,000	6,240	16,240	26,240
Delta	18,500	22,000	26,000	30,000	3,500	7,500	11,500
Total	119,180	142,000	174,000	217,000	22,820	54,820	97,820
<u>School Districts (Enrollment)</u>							
Moffat #RE-1	2,175	2,620	3,100	4,100	445	925	1,925
Rio Blanco #RE-4	608	2,300	3,900	6,500	1,692	3,292	5,892
Garfield #16	183	390	680	6,000	207	497	5,817
DeBeque #49	163	200	210	480	37	47	317
Mesa Co. #51	13,467	15,000	17,000	19,000	1,533	3,533	5,533
Delta Co. #50	4,222	5,230	6,140	7,050	1,008	1,918	2,828
Total	20,818	25,740	31,030	43,130	4,922	10,212	22,312

Source: Table A-13, Bickert, Browne, Coddington & Associates, Inc., "Boom Town Financing Study, Volume II, Estimates of Public Sector Financial Needs, Six Western Colorado Communities," July 1976.

Capital Needs

Capital needs to support potential increases in population were estimated for each school district, county and municipality in the case study areas. Projected needs are summarized below:

Local Government Entities	Peak Year Population Projections					
	Low		Medium		High	
	Dollars	Percent	Dollars	Percent	Dollars	Percent
Municipalities	\$ 7.7	27.4%	\$19.8	28.9%	\$ 49.3	31.8%
Counties	5.7	20.3	13.5	19.7	24.0	15.4
School districts	<u>14.7</u>	<u>52.3</u>	<u>35.2</u>	<u>51.4</u>	<u>81.9</u>	<u>52.8</u>
Total	\$28.1	100.0%	\$68.5	100.0%	\$155.2	100.0%

School districts. School district capital needs account for over half of the total estimated needs. However, school districts have the greatest capability to finance their needs through use of capital reserve funds and borrowing. Shown below are school district capital needs after use of capital reserve funds, compared with projected debt limits for the three development profiles:*

	Millions of Dollars		
	Low	Medium	High
Capital needs	\$ 14.7	\$ 35.2	\$ 81.9
Less capital reserve funds	19.4	21.1	27.2
Residual after use of capital reserve funds	--	14.1	54.7
Debt limit	152.6	166.5	290.0
Ratio of debt limit to residual capital needs	↓	11.8	5.3

Viewing the six school districts on an aggregate basis, and disregarding possible phasing problems, it would appear that local tax base resources are more than adequate to finance needed capital improvements.

*The DeBeque school district does not maintain a Capital Reserve Fund. The Rio Blanco District 4 has a three mill levy while the other districts' levy is four mills for the Capital Reserve Fund.

One area of uncertainty in school financing is whether or not voters will agree to borrow to finance classroom and other capital facility needs. Preliminary analysis indicates that with energy development, mill levies can be held at reasonable levels (or reduced in certain districts) even with some use of debt financing. The use of borrowing will not, in general, place undue hardship on present residents. Generally, new energy-related projects can be expected to bear the major burden.*

Counties. County capital requirements within the list of high priority items are limited--representing less than one-fifth of the total estimated need--totaling a maximum of \$24.0 million.

In the cases of Moffat and Rio Blanco Counties, debt limits are more than adequate to cover needed improvements. For these two counties, the ratios of debt limit to capital needs are:

Peak Year Population Projections	<u>Millions of Dollars</u>		Ratio of Debt Limit to Capital Needs
	Capital Needs	Debt Limit	
Low	\$2.2	\$ 8.1	3.7
Medium	4.9	8.2	1.7
High	8.7	14.6	1.7

With the exclusion of these two counties, total county capital needs for the three remaining counties are:

<u>Peak Year Population Projections</u>	<u>Capital Needs (millions)</u>
Low	\$ 3.5
Medium	8.6
High	15.3

A portion of this remaining need can undoubtedly be covered by debt financing. Another potential source is a county sales tax (or sales tax increase). Moffat County imposes a two percent sales tax and Delta County presently imposes a one percent tax.

*A possible exception is in Mesa County District 51.

Municipalities. Capital improvement needs for the municipalities approximate one-third of total capital needs. However, financial resources to fund these expenditures are more limited than in the case of either the school districts or counties.

Shown below is a comparison of capital needs versus debt limits and possible funds available from water and sewer tap fees:

	Millions of Dollars		
	Low	Medium	High
Municipal capital needs	\$ 7.7	\$19.8	\$49.3
General obligation debt limit	11.1	14.1	20.2
Tap fees (present rates)	4.4	9.4	23.0

In the case of municipalities, there is little incentive to finance capital improvements through general obligation debt. The burden of repayment cannot be passed on to energy companies.

Tap fees are a more reasonable source of funds. In general, it would appear that if tap fees (in excess of the cost of tap installations) are earmarked for capital improvements, or servicing of water and sewer revenue bonds, the magnitude of the municipal financing problem is reduced by one-third to one-half. Additionally, the incidence of burden is more evenly placed on new residents--those requiring the additional services.

Other potential revenue sources to finance municipal capital needs are sales tax increases, direct aid from energy developers, Environmental Protection Agency grants and state and federal assistance. Municipalities will be the most vulnerable to phasing or lead time problems. Given present circumstances, front-end financing for municipal facilities will not be available on a timely basis in energy-impacted communities.

Housing

The magnitude of new housing required in the case study areas was estimated using the population and household estimates, income levels and type of employment of workers (construction, plant operation or mining,

and local service). The housing preferences of these various categories of workers differ significantly (construction workers generally need mobile home pads and rental housing, for example). This has been taken into account in the housing estimates.

Total new housing needs, by type, for the five case study counties are:*

Type of Housing	1975	Additional Units Needed		
		Low	Medium	High
Single family	31,877	1,434	6,749	12,318
Multifamily	6,376	1,154	4,332	6,308
Mobile homes	6,088	3,612	7,537	14,918
Total	44,341	+6,200	+18,618	+33,544

The total cost of providing new housing in the five counties is estimated to be:**

Type of Housing	Millions of Dollars		
	Low	Medium	High
Single family	\$ 57.4	\$270.0	\$492.8
Multifamily	25.7	96.6	140.6
Mobile home pads	19.9	41.4	82.1
Total	\$103.0	\$408.0	\$715.5

*Bickert, Browne, Coddington & Associates, Inc., op. cit., Table A-11.

**Ibid., Table A-12.

SECTION III. DESCRIPTION OF MAJOR PROBLEM AREAS

This section identifies and describes major problem areas related to the provision of public financing and housing in boom towns. Possible alternatives for dealing with these problem areas are discussed in more detail in Section IV.

Criteria used in identifying potential problems were:

- (1) Magnitude of the problem. The Governor's Advisory Committee agreed to concentrate its efforts on those problem areas requiring the largest financial resources. The dollar estimates developed for the six case study areas, summarized in the previous section, were used in determining the magnitude of public sector and housing financial needs.

- (2) Complexity of the problem. Certain problems loom large in terms of dollars, but they can be dealt with fairly readily. Examples of

these types of problems include financing of school classrooms and supplying permanent housing in certain slower growth areas. The Committee focused on the more complex or difficult problems where there appeared to be fewer alternatives, or where solutions tended to involve state and local government as well as industry.

- (3) Problem areas where the state can have an impact. It is not the intent of the study to develop detailed plans for local government or industry in assisting impacted communities. Rather, the prime emphasis is on problem areas where state government can play a key role by working with local government, industry and the federal government.

Major problem areas were identified as: lack of capital funds and financial resources at the municipal level, lack of a front-end funding mechanism at the state level, lack of a coordinated state level program to alleviate energy impact, and potential shortages of both temporary and permanent housing.

Capital Funds for Municipalities

Of the three types of local government described in the case studies, it is evident that municipalities have the least ability or financial resources to adequately provide public facility needs on a timely basis. Although the total cost of building new classrooms and other educational facilities represents a large sum of money (\$82 million in 1976 dollars for the six case study school districts over the next decade), school districts appear to be in the best position among the three local government types to generate these funds. County government is expected to have the lowest public facility requirements, and generally has the necessary bonding capacity to finance needed facilities.

The problem facing municipalities is due to a large expected influx of new residents without a corresponding increase in the tax base. Energy facilities tend to be located outside city limits, and in one case, across the

state line, and usually do not directly affect the assessed valuation of the municipality. Municipal revenues are often based on sales tax receipts, user fees and other fees which tend to increase with population. In most cases analyzed, these increased revenues should be adequate to cover operating costs, but not major capital improvements. Analysis of the six case study areas verified this shortage of capital financing. Rock Springs, Wyoming and other energy-impacted communities in the Rocky Mountain Region also have found this to be the case.

If municipalities fail to provide needed public facilities, particularly water and sewer systems, the ability of the community to provide adequate housing at reasonable costs is seriously impaired. Under these circumstances, construction of new housing will require wells and septic tanks or other less than satisfactory arrangements. This, of course, creates long-term problems and adds to the cost of new housing.

Municipalities have little incentive to finance capital improvements through debt because the burden of repayment cannot be passed on to energy companies. Water and sewer tap fees are a more reasonable source of funds. Other potential revenue sources to finance municipal capital needs are sales tax increases, direct aid from energy developers, EPA grants and other federal and state assistance.

The questions are then, how can municipalities be assisted in dealing with front-end financing needs primarily for capital facilities; and how can a more equitable distribution of tax revenues among school districts, counties and municipalities be achieved? If these problems can be dealt with, the ability of municipalities to finance needed capital improvements will be measurably enhanced.

The Need for a New Source of Front-End Financing

The lack of funds that can be used in meeting front-end financing needs on a timely basis is a critical problem. In the six case studies, for example, there appears to be a need for up to \$30 million in assistance to municipalities. This estimate is under the most intensive development profile and

assumes that population in the six municipalities would increase 131 percent over present levels (see Table 1).

As indicated earlier, there is little ability or desire to rely on debt financing at the municipal level. Hence, there is a need for some funding on a loan or grant basis (no repayment). The Advisory Committee strongly favors loans (repayments) over grants, but recognizes that in certain cases, repayment is not a practical alternative.

Potential sources of monies that could be used for impact alleviation and methods of administering these funds are discussed in detail in Section IV.

Integrated State Response to Energy Impact

Problems likely to be experienced by a community impacted by large scale energy development are so numerous and complex that outside technical assistance is certain to be required. Such assistance is in part presently available within state government in Colorado. However, sources of technical assistance are fragmented, and those having the technical expertise often do not have ready access to necessary funding sources. Also, impacted communities are often eligible to receive grants directly from the federal government, but these federal programs are frequently not tapped, at least not on a timely basis, because officials are not aware of the programs. There does not now exist any one focal point at the state level where local governments can receive coordinated assistance in dealing with the multitudinous effects of energy development.

Community Planning for Energy Impacts

Local governments in energy-impacted areas have an urgent need for up-to-date, comprehensive contingency plans. Local government officials in the six case study areas are faced with a tremendous amount of uncertainty; they are sometimes criticized for lack of planning, but do not have ready access to the basic variables; e.g., accurate employment estimates, construction schedules, projected capital investment, or funding to develop such plans.

The type of planning needed in potential boom town communities goes well beyond the typical land use and capital facility plans most communities are accustomed to developing. Boom town plans will need to consider the whole gamut of social and economic impacts and include detailed year-by-year financial projections for each impacted public entity. Ideally, such an analysis should also include the development of a systematic program for mitigating potential negative impacts.

The degree of detail and sophistication in financial planning described above is not being carried out in small Colorado communities at the present time. Nor are there sufficient funds available, or motivation, for communities to engage in such efforts. The cost of preparing a financial analysis and projections for each municipality, county and school district likely to be impacted by energy development does not represent a large sum of money. Yet it would be unfair for local government entities to have to bear the full financial burden required for the preparation of such detailed projections.

One of the most difficult problems discussed by the Committee is related to the local planning process: "What are the triggering mechanisms that signal a community to move ahead in the implementation of its plans?" For example, when should a school district begin to construct classrooms for the children of oil shale or power plant workers? A school district may be accused of being negligent if it waits until the children have arrived on the scene before commencing construction of classrooms. On the other hand, how far in advance can such facilities be built given the uncertainties associated with large scale energy development? The Committee is generally sympathetic with energy companies and their inability to develop precise plans for the future, particularly in a case of oil shale. At the same time, the problem is doubly difficult at the community and school district level where often local officials do not have access to adequate information upon which to begin to implement plans and programs aimed at mitigating possible negative impacts caused by rapid population growth.

Providing Temporary Housing

Most energy-impacted communities will have an immediate need to provide sizable amounts of temporary housing for construction workers. This was found to be true in the case study areas. The construction work force for a 50,000 barrel per day oil shale processing plant may exceed 2,000 workers, and the work force required to build a 500 megawatt power plant can exceed 1,000. Hence, it will be necessary to provide substantial quantities of temporary housing during construction periods. The case study areas likely to be impacted by the largest number of construction workers are Craig, Rangely, Battlement Mesa and DeBeque. Grand Junction may become the residential base for construction workers, but since these workers are expected to come from a variety of energy projects, a higher proportion can probably be housed in permanent housing. Paonia will be impacted by construction workers in connection with opening and expanding several underground coal mines, but the number of construction workers needing housing appears to be manageable.

Some major problems associated with housing construction workers have to do with financing and building an adequate number of pads for mobile homes. Under normal financing arrangements, a mobile home park should pay for itself within a five to seven year period. However, in some energy-impacted communities, the duration of the construction period is expected to be less than the normal five to seven year pay out period. Hence, developers of mobile home parks must charge high rates to realize a satisfactory return on investment, or such parks might have to be subsidized by energy firms or their major contractors. Therefore, it is doubtful that normal market mechanisms for constructing and providing mobile home pads will function adequately in energy-impacted communities.

A closely related problem here is who should be responsible for providing mobile home pads for construction workers. If mobile home parks do not represent an attractive investment opportunity, who should provide the necessary financing to insure that such parks are available when needed? (This problem is analyzed in more detail in Section IV.) Further, there

is the problem of what to do with mobile home pads at the end of the construction period when the need for them no longer exists.

The poor appearance and austere surroundings of many mobile home parks in the Rocky Mountain Region negatively affect the quality of life in such communities. Poor living conditions are a source of many serious social problems, particularly for the wives and children of construction workers who must live under these conditions. The challenge will be to provide a sufficient number of mobile home pads at a cost acceptable to construction workers and in as attractive and well planned environments as possible. This is a challenge which can be met as evidenced by the efforts of the Yampa Project participants (including Colorado-Ute Electric Association) in Craig.

Permanent Housing

Financing problems associated with provision of permanent housing appear to be fewer and less complex. To some extent, permanent housing can probably be successfully provided by relying primarily on existing financial mechanisms, both private and public. However, there are some concerns that must be addressed.

Providing financing for housing in areas such as northwestern Colorado can present problems because the financial needs normally exceed available local funds. Commercial banks and savings and loan associations in western Colorado have limited resources relative to real estate capital needs; but there are mechanisms available to import capital, such as holding company relationships, correspondent banks or use of secondary mortgage loan markets.

The risks involved in providing mortgage funds in energy-impacted areas is another concern. There is a question whether the duration of the projects is sufficiently long enough to provide adequate assurance that loans will be repaid. Much of the risk and uncertainty in financing housing in boom town areas would be reduced by a national energy policy

which guaranteed the economic feasibility of oil shale processing and other synthetic fuel development (coal gasification is one example). It is unlikely, for example, that under present circumstances a financial institution would make mortgage financing available in large quantities in a community like Rangely for the purposes of providing housing for oil shale workers.

Probably the most serious problem in providing permanent housing is the inflationary costs of new housing construction. Experience in other energy-impacted communities indicates that with the high wage rates of construction workers, the cost of providing housing becomes prohibitively expensive. A partial solution here would be to rely upon modular units where most of the construction is accomplished off-site leaving only assembly work to be done on-site.

Attracting quality builders to communities likely to be impacted by energy development is yet another concern. Again, the experience in other states suggests that quality builders have not been attracted to such communities, and there are obvious deficiencies in the quality of construction and total community development that takes place.

Major Problem Areas--A Summary

In summary, the most critical financially-oriented boom town problem areas anticipated for Colorado over the next decade are:

- (1) Capital funds for municipalities
- (2) The need for a focal point in state government
- (3) Inadequate community financial planning for energy impacts
- (4) Provision of temporary housing
- (5) Provision of permanent housing

SECTION IV. ANALYSIS OF ALTERNATIVES

In developing possible methods for dealing with the major problem areas just described, the Governor's Advisory Committee considered the following general criteria:

- (1) Does the proposed action provide sufficient dollars?
- (2) Does the proposal offer timely assistance?
- (3) Does the recommendation distribute the financial burden equitably among present residents, new residents, energy industry and its customers, and all levels of government?
- (4) Is the recommendation reasonable and acceptable to the parties involved?
- (5) Will the appropriate level of government respond?
- (6) Will the recommendation create undue side effects that would result in increased environmental and/or social costs?

Front-End Financing for Municipalities

The most critical problem identified by the Advisory Committee is the inequity of revenue sources and financial burdens on various levels of local government (municipalities, counties, school districts) resulting in part from jurisdictional limitations on taxing authority.* Inequalities exist where municipalities normally receive a high proportion of the population impacts from energy development, but have the least financial ability to provide services and facilities for these new residents. Counties and school districts also experience financial burdens, but are more likely to have the borrowing capacity, and other resources resulting from a large increase in the tax base, to deal with the impacts.

There is yet another area where the financial burden may not be distributed equitably. Municipally owned power plants are exempt from local property taxes, even when constructed outside the political and taxing jurisdiction of the owning municipality. Thus, the area receiving the impact from the facility may have no increased property tax base to help pay for the additional burdens created. The law could be revised to require payments in lieu of taxes where significant additional burdens are placed on areas otherwise unable to tax such facilities.

There are basically two methods for dealing with the problem of inadequate financing for municipalities, and to a lesser extent, other local government entities. One is to establish institutional mechanisms for a more equitable sharing of the tax base and revenue sources among various levels of government. The second alternative is to have funding readily available at the state level to assist impacted municipalities. The latter alternative is discussed later in this section as a part of the need to consolidate and expand funding sources at the state level. The Advisory Committee believes that both approaches--encouragement of the pooling of tax revenues and development of a significant state impact assistance fund--are needed to deal with front-end financing problems.

*In addition to the difficulties experienced by municipalities when energy facilities are located in the county, there are also potential interstate problems. For example, Rangely is likely to experience major population impacts from the two proposed oil shale plants in Utah.

Under Colorado law,* it is possible for governments to cooperate or contract with one another to provide any function, service or facility lawfully authorized to each of the cooperating or contracting units, including sharing of costs, imposition of taxes, or incurring of debt. However, to date, local governments have not used this enabling legislation to its fullest advantage.

A good example of how intergovernmental cooperation can work is the use of the Wyoming Joint Powers Act of 1975. It permits counties to join with municipalities on any public project that municipalities are empowered to carry out. Localities can solve tax imbalances by combining tax bases where the development may be in the county but the impact on the municipality. Joint powers agreements are voluntary, but generally states do have some leverage to encourage their use. The Wyoming Joint Powers Act is being widely utilized in Rock Springs and Green River with Sweetwater County, Wheatland with Platte County, and Gillette with Campbell County.

There is likely to be competition among local government units in a rapid growth situation.** There is little or no incentive for counties, for example, to share a portion of their tax base (property or sales tax receipts) with municipalities. In fact, in the early stages of a boom situation, county government officials are likely to perceive that their own financial resources are not adequate to meet county responsibilities. Three general approaches in dealing with the problem of inequities of tax revenues and local government burdens are:

- (1) Ad hoc approach. Under this approach, municipalities and counties (or two counties) can voluntarily work out the problem on a case-by-case basis. This could happen, for example, in the case of the

*See Colorado Revised Statutes, 1973 29-1-201, Part 2, Intergovernmental Relations.

**One approach to promoting cooperation, and lessening competition, among local government entities is the establishment of a priorities board. The Sweetwater County (Wyoming) Priorities Board brings together representatives of county and municipal government, industry and local citizens to deal with potential problems on a coordinated basis.

Colowyo mine which is located in Moffat County, but may have major population impacts on Meeker (Rio Blanco County). Gunnison and Delta Counties could also work out a fair agreement relative to the North Fork coal mines. Much of the mining activity is in Gunnison County, but the impacts are occurring in Delta County, particularly in Paonia and Hotchkiss.

- (2) Special incentives. To encourage local governments to cooperate, the state could offer several inducements. A possible incentive for local government joint programs could be offered in the form of reduced interest rates on loans for public facilities and services; or state financial assistance for the construction of certain public facilities could be conditioned upon local government cooperative efforts. The provision of state funding for law enforcement is another example where funding could be made conditional on a cooperative municipal/county approach to provide law enforcement. Other local government services and facilities likely to lend themselves to this approach are recreation, airports, vocational schools or junior colleges, and street and highway improvements.
- (3) Mandatory tax base and revenue sharing. The Minnesota Fiscal Disparities Act provides a model for a mandatory approach. (See Appendix B for explanation and analysis of this act.) This legislation provides a basis for sharing increases in assessed valuation in a large area, such as a multi-county metropolitan area, among each political jurisdiction within the area in proportion to total population. Its application in Colorado might best be on a regional level. For example, all local government jurisdictions in an energy-impacted area might share in a portion of the tax base generated from new energy facilities built in the region.

Energy Impact Assistance Fund

Sharing of tax base and revenue sources is only a partial answer to the front-end financing needs of local government. Additional funds will be

needed to finance capital facilities at all three levels of local government--school districts, counties and municipalities. In the case of school districts and counties, the need for additional capital is likely to be of short duration and there will be an adequate tax base to repay state funding over a longer period of time. However, at the municipal level, a combination of loans and grants is more appropriate.

The creation of a state Energy Impact Assistance Fund is a method to accommodate this need for additional funds at the local level. Such a fund could provide various forms of interim front-end financing, on a timely basis, to energy-impacted areas within the state. The basic philosophy of the Governor's Advisory Committee is that state funding should be made on a repayment basis; but it also recognizes that, in some circumstances, repayment may not be feasible. Therefore, some loans may have to contain a forgiveness clause, or funds will need to be distributed in the form of a grant.

Major potential sources of monies that could be used for an impact fund are:

- (1) Royalty payments to the state from the Federal Coal Leasing Amendments Act of 1975 (Public Law 94-377).
- (2) Monies in the state Oil Shale Lease Fund (also known as Oil Shale Trust Fund).
- (3) Interest from the monies in the state Oil Shale Lease Fund.
- (4) Proceeds from a coal and uranium severance tax.
- (5) Federal aid included as part of a synthetic fuel bill.
- (6) Appropriations from the state legislature.
- (7) Issuance of bonds or borrowing from the Bureau of Land Management, Department of the Interior.

Federal Coal Leasing Amendments Act of 1975. Until it was amended in August of this year, states received 37.5 percent of generated revenues under

this act. In Colorado, these monies amounted to \$34.5 million in fiscal year 1976, and were distributed as follows:*

- \$1.7 million to counties for roads and schools
- \$8.2 million to the state school fund
- \$24.6 million to the Colorado Oil Shale Lease Fund

With the 1976 amendments, Colorado's share of revenues from this act will increase by one-third to 50 percent. There are no limitations on the use of this additional 12.5 percent, other than the general guideline that funds be used to assist local government entities which are socially or economically impacted by development of federal leases. In fiscal year 1977, Colorado is expected to receive an additional \$3.3 million in non-oil shale money as a result of this increase in revenues. These funds could form the nucleus of an Energy Impact Assistance Fund.

Oil Shale Lease Fund. The state has received, through fiscal year 1976, \$73.8 million for deposit into the state Oil Shale Lease Fund. Interest earned on these monies was \$2.7 million for the year ending June 30, 1976, and should exceed \$3.0 million annually in the years ahead. The Colorado Legislature has appropriated \$15.1 million from the Oil Shale Lease Fund through fiscal year 1977.

All the money currently in the Oil Shale Lease Fund (\$65.2 million as of August 1976) could be placed in the proposed Energy Impact Assistance Fund. However, it is the general opinion of the Advisory Committee that these monies should be reserved for those areas likely to be impacted by oil shale development and should not be made available for other types of energy impacts. In the event of massive development of oil shale, these funds can play a key role in the total public sector financing needs of the impacted areas.

*Colorado Legislative Council, Memorandum No. 9, "Federal Mineral Act of 1920--1975-76 Revenue Allocation and Recent Federal Amendments," September 17, 1976.

Interest on Oil Shale Lease Fund. A third alternative is to utilize only the interest from the Oil Shale Lease Fund as a part of an overall Energy Impact Assistance Fund. Interest should exceed \$3 million annually as long as the principal remains intact. The interest portion of the Oil Shale Lease Fund should be available on a "quick response" basis for community financial needs in the oil shale region. Hence, the Energy Impact Assistance Fund is a logical place for these monies.

Other sources of funds. In the event a synthetic fuel bill is passed by the U.S. Congress, federal aid will probably be available to energy-impacted communities. Some of these federal dollars could be included in a state Impact Fund.

Another source of dollars could be the revenues from a severance tax on coal and uranium. A portion of the proceeds from such a tax could be earmarked for local impact alleviation via the Impact Fund. Once the proposed Energy Impact Assistance Fund was fully funded, previously earmarked severance tax proceeds would revert to the state general fund.

The Colorado Legislature could also appropriate monies to help establish and replenish the Fund as needed. The Fund could also borrow by issuing bonds; or money could be borrowed from the Bureau of Land Management (BLM). This agency can make loans (at three percent interest) in anticipation of receipts from royalty payments.*

The Advisory Committee views the need for an Impact Fund as being especially urgent for use in areas impacted by coal, uranium, and power plant development. Areas likely to be impacted by oil shale development already have access to the Oil Shale Lease Fund, which can at least partially accommodate financial needs.

The Advisory Committee concluded that an Impact Fund would best be administered by a special office within the Department of Local Affairs. It

*Federal Land Policy and Management Act of 1976.

would also be advisable to have a review board working with that state office in the administration of the Fund. This board should include strong regional representation from energy-impacted areas.

State Focal Point for Energy Impact Assistance

With anticipated increases in energy resource development in Colorado, there are numerous reasons for creating a single state focal point to deal with social, economic and public finance problems resulting from such development. Coordination and integration of public and private energy development activities would be the principal objective of such a state focal point. The history of energy development projects in the West shows that nearly all projects have involved starts and stops, changes in plans and erroneous estimates of size, timing, cost and impacts. Most of these problems result from uncertainty, lack of coordination and/or integration of plans. To insure high quality productive development, coordination and cooperation is essential. For the purpose of further discussion, the proposed state focal point is referred to as the Impact Office.

The primary purposes of an Impact Office would be to:

- (1) Administer an Energy Impact Assistance Fund,
- (2) Provide impacted areas with a single point of access to state technical expertise on a variety of potential community development problems related to energy impact, and
- (3) Coordinate state, federal, local and industry activity in energy development.

The Impact Office could perform the following major functions:

- (1) Assist in the development of designation standards that would be used to determine eligibility of potential energy impact boom towns and areas. Using these standards, along with other criteria, identify specific communities and/or areas which would be eligible for various types of financial assistance.

- (2) Encourage the development of financial contingency plans by local government entities within these areas. Suggest standards for such plans, provide technical assistance in their development, and assist in funding these efforts. Assist local areas to maintain their financial plans on a current basis.
- (3) Encourage areas likely to be impacted to establish local impact task forces, committees, or priorities boards. These local groups would include representatives of a wide variety of local area interest groups (mayors, county commissioners, school administrators, COG planners, business leaders, etc.).
- (4) Assist in the preparation of front-end financing packages. This would include working with energy industry, local government, federal agencies and state resources.
- (5) Provide staff support and administer the Impact Fund.
- (6) Maintain an inventory of expertise and financial assistance available to impacted areas from state and federal government sources.
- (7) Serve as an advocate of and expeditor for energy-impacted areas within state government and with federal agencies.
- (8) Monitor socio-economic impacts as they develop. In order to improve the process of anticipating energy impacts in the future, documentation (or a monitoring program) may be needed.

Financial Planning

Present community financial plans and the planning process for dealing with the financial impacts of population growth induced by energy development are generally inadequate (see discussion in Section III). This is partially due to lack of expertise and funding for the planning function and not enough systematic cooperation by industry. At the very least, energy

companies need to supply local governments with employment plans relative to construction and permanent workers, capital investment schedules and plans for employee housing. Finally, there is need for a better "triggering mechanism" to signal the start of implementation of development plans.

There are several alternatives that would encourage industry cooperation with community level planning problems. One possibility is the establishment of a formal energy facility siting procedure which would mandate cooperation. A second approach, recommended by the Advisory Committee, is to develop incentives that would encourage energy firms to make timely and complete disclosures of their plans to communities likely to be impacted, and to the state Impact Office.

To facilitate better financial planning at the local level, the state Impact Office should have funds available for local government. These financial planning grants should be of sufficient magnitude to allow local government entities to contract for technical assistance when not available at the state level, and to at least partially reimburse local governments for their financial planning costs. The Committee does not think that local governments should bear the full cost of planning. Community financial resources should be conserved to meet front-end financing needs when impacts occur.

In most cases, it will not be feasible or even appropriate for local governments to begin construction of facilities (school classrooms, water distribution systems, sewage treatment facilities, etc.) in anticipation of an influx of new residents. Nor is it practical to begin construction of mobile home pads or new homes in advance of energy development. However, if communities are requested by an energy company to proceed with construction of facilities prior to the influx of new residents, local government officials should ask for performance guarantees from industry in the event anticipated growth does not materialize.

Provision of Housing

The basic elements in the typical housing production and delivery system in a small community are preparation (land acquisition, planning and zoning), production (site preparation, utility construction and financing), distribution (sale and subsequent resale and refinancing), and service (maintenance and repairs, improvements, and additions).^{*} In most cases, this system operates at a level sufficient to meet minimum housing needs. However, it is inadequate to meet accelerated demand generated by energy development.

The provision of both temporary and permanent housing in energy-impacted areas can be approached in three steps:

- (1) Stimulation of traditional sources of financing, home building and mobile home park development.
- (2) Effective use of existing federal, state and local housing programs.
- (3) Participation of energy developers and their prime contractors.

Stimulation of traditional housing industry. There is evidence in many smaller energy-impacted communities in the Rocky Mountain Region that traditional approaches to providing housing have not functioned adequately. There is usually a shortage of mortgage money from local financial institutions, and a reluctance on the part of larger institutions in major cities to commit funds to boom towns. The local home building industry cannot usually satisfy, in a timely fashion, the demands for large numbers of new homes; and providing a sizable number of mobile home pads may not represent an attractive investment opportunity if anticipated needs for these pads are of short duration. One of the most damaging effects of the typical energy-impacted boom town in the Rocky Mountain Region has been the astronomical inflation in housing costs, especially site

^{*}Report of the President's Committee on Housing, U.S. Government Printing Office, Washington, D.C., 1968, p. 115.

acquisition and preparation expenses. The following quote is indicative of the problem:

In these years Craig has been transformed from a quiet ranching community to a bustling boom town, the product of energy development. The town is sprawling in every direction, with developments filled with mobile homes, campers and, in a few instances, tents. Housing prices have soared. The demand for housing has pushed up the prices for existing or new sites. Price becomes no object in dealing for a site home. As a result, local real estate agents are busy hustling their neighbors, trying to get them to sell their two- and three-bedroom homes worth about \$15,000 a few years ago for prices in excess of \$50,000.*

One possible way to solve a portion of this problem is for local municipalities or housing agencies (perhaps in collaboration with energy developers) to purchase and hold vacant land for future housing needs. Reasonable site acquisition costs can mean the difference between an economically feasible project and one that is not.

Another approach that would help in meeting housing demands is for local financial institutions to become more familiar with secondary sources of mortgage and construction funds. The Savings League of Colorado has excellent resources for assisting in this area and has expressed a willingness to cooperate. The Colorado Housing Finance Authority, a quasi-public body established by the Colorado Legislature, can also assist in making alternative sources of financing available by adapting their lending requirements to better fit the local lending institutions.

Experienced developers and builders have been encouraged to work with less experienced, smaller scale operators in several traditional public housing projects in the state. The results of these cooperative projects have been good. Housing officials in the Denver Metropolitan Area, both in the private and public sector, believe that such cooperative ventures can be utilized successfully in many energy impacted situations.

*Rocky Mountain News, "Boom Town Problems Cast Pall on Craig," September 19, 1976.

Finally, the traditional housing industry might be utilized more effectively by: (a) insistence upon better data from energy companies relative to the magnitude and duration of employment, (b) timely provision of utilities, primarily water and sewer, and (c) increased use of the planned unit development (PUD) concept in smaller areas.

Effective use of existing government housing programs. One of the more timely methods of addressing housing problems in energy-impact areas is through more effective utilization of existing government programs. This approach takes full advantage of established programs and agencies, with emphasis on expansion of present capabilities.

It is important that all levels of government recognize the special housing needs of energy-impact areas, and make special provisions for meeting those needs. As a major supplier of housing funds, the federal government could formally recognize such specialized needs by amending the Housing and Community Development Act of 1974, with special emphasis on coordinating housing and community development efforts in energy-impacted communities. The act presently recognizes special needs of the elderly, the handicapped, households headed by females and minority groups.

In addition to including provisions for identifying and accommodating special housing needs in energy-impacted areas, the federal government can provide financial assistance in meeting those needs. This could be accomplished through the two principal federal housing agencies--the Department of Housing and Urban Development (HUD) and the Department of Agriculture, through Farmers Home Administration (FmHA). Both departments make funds available for home financing (both single and multifamily) and housing rehabilitation. Farmers Home programs are restricted to communities of 20,000 population or less; HUD can work throughout the state.

Colorado receives approximately one percent of the HUD and FmHA housing allocations. In 1975, Colorado applications for the FmHA 515 Program exceeded the \$2.5 million allocation by \$6.0 million. Applications for the

FmHA 502 Program exceeded the \$3 million allocation by \$8 million. This deficiency is indicative of the immediate financing needs in rural areas of the state. Special allocations, over and above regular appropriations from HUD and FmHA, should be earmarked for energy impacted housing needs.

Although increased special allocations will be helpful, it is evident that Colorado's energy impact generated housing needs cannot be met solely through federal appropriations. Financing for the new construction, as well as housing rehabilitation, should also be available at the state level. As suggested earlier, these funds could be disbursed through existing state housing agencies.

The Colorado Housing Finance Authority (CHFA), an existing source of mortgage money, works primarily with moderate income families. Under the "Loan to Lenders" Program, it provides loan money to lenders at below market interest rates. This money is in turn loaned out to moderate income households (maximum family income of \$14,300 after deductions) for home purchase. CHFA is also involved in financing multifamily dwellings for low and moderate income households.* The CHFA, by designating special program funds for housing needs in energy-impacted areas, could offer significant assistance. Modification of some of its programs and creation of new ones is also necessary--new guidelines on income levels, interest rates, and collateral, establish a capital reserve fund to finance mortgages other than those insured by FHA, and create rehabilitation loan authority for home improvement loans.

Another state housing agency that could be utilized as a conduit for program funds to meet energy impact housing needs is the Colorado Division of Housing (DOH). The Division of Housing is a source of direct grant funds. These monies must be matched on at least a 50-50 basis, and are to be used for innovative programs to serve low income housing needs throughout the state. The DOH programs provide a great deal of flexibility. Funds can be used for a variety of projects, from land acquisition

*Colorado Housing Finance Authority, Annual Report, 1975, pp. 8-9.

to housing rehabilitation. The DOH grants budget (\$1 million in 1976) does not begin to meet present community housing requests and certainly would be inadequate in meeting additional needs generated by energy development. In order to provide assistance to these communities, the state Division of Housing will need additional funds appropriated for low income housing. The DOH could also develop special financing and management demonstration projects for boom towns, and coordinate applications to various federal agencies (HUD and FmHA) to insure adequate funding levels.

Other methods for focusing DOH efforts on energy-impacted areas are being developed as a part of the recommendations of the Governor's Task Force on Housing.* The Task Force is recommending changes that should make the allocation process easier, and it is also proposing that all HUD-CD housing applications in Colorado, including potential energy-impacted areas, be coordinated at the state level. These steps should make additional federal funds available, save time, and cut housing costs. The Advisory Committee concurs in the Housing Task Force's recommendations along these lines.

Another way to improve the availability of mortgage money in energy-impacted areas is to create a regional housing authority. Aggregation of housing needs within a larger geographic area leads to more attractive and feasible housing packages for lenders, builders, and for HUD. A regional housing authority can also buy land for development. Existing state legislation will need to be amended in order to create regional housing authorities.

In addition to direct financial assistance through existing government programs, modifications of present government policies and procedures,

*The Governor's Task Force on Housing was created by Executive Order in August 1976. It is charged with "developing housing programs to be introduced at the first session of the 51st General Assembly; developing plans for increased cooperation among Colorado state government, U.S. government and the private sector; and proposing administrative changes to help meet the housing needs of the people of the State of Colorado."

especially at the local level, could help satisfy housing needs in energy-impacted communities. The practices of the housing industry are not standardized throughout the country. Builders must deal with every community on an individual basis. Each community represents a specific set of restrictions--from climate and soil conditions to zoning and building requirements. It can become costly for builders to modify plans and proposals to meet the various standards set by individual localities. This problem becomes particularly acute in areas impacted by energy development. For example, some localities have their own building and zoning inspectors, some rely on county or state inspectors, and in others county clerks issue building permits. Efforts should be made to align and simplify codes and regulations and increase local private housing construction capabilities so as to facilitate orderly development of all types of housing--stick built, factory built, as well as mobile homes. Communities should examine their codes and regulations to determine how they affect the cost of housing production. For example, large lot zoning inhibits the development of low cost housing and setback requirements limit the use of zero lot line development.

An important housing form in energy-impacted areas is the mobile home. Mobile homes, unlike on-site housing construction, now have nationally recognized design standards.* These standards are in effect in every state. Unfortunately, national standards do not always accommodate unique situations. Some problems peculiar to Colorado include: special provisions for furnace output at high altitudes and increased snow and wind load capabilities.

While the federal government has stipulations on mobile home designs, the community is still responsible for setting up site criteria and park regulations. Many communities have restrictive zoning regulations related to mobile homes. Others prohibit them altogether. Mobile homes are a viable source of easily acquired, lower cost housing. They play a major role in

*Federal Register, Mobile Home Construction and Safety Standards, December 18, 1975.

meeting needs in energy-impacted areas. Uniformity of communities' codes, regulations and standards would allow for optimum utilization of mobile homes throughout energy-impacted regions.

Participation by energy firms. Implementation of the previous suggestions will partially solve the housing needs in boom towns. Where unmet housing demand remains, energy firms should play an active role. This may involve land acquisition, attracting builders to the area, mortgage guarantees, formation of development organizations and other inducements to the housing industry. The Advisory Committee is not in favor of the construction of "company towns," but it recognizes that there may be no other alternatives in certain cases. In these unique cases, energy firms can play a key role.

Some examples of the types of activities industry could become involved in are:

- Land acquisition. Energy firms know earlier than anyone else that new jobs will be created leading to the need for housing. One way to help control housing costs is to acquire relatively large tracts of land before speculation causes price increases. This land can be used later for residential development when the energy firm deliberately keeps housing costs down by not taking a large profit on land investment.
- Mobile home park development. Development of mobile home parks by energy firms is a common approach to providing housing. One innovation, presently used in Craig and Wheatland, Wyoming is to design the mobile home parks with two homes on each lot so that they may be converted later to single family use.
- Sales guarantees. An energy firm could encourage a home builder to build homes by guaranteeing to purchase the homes at a pre-determined price. The energy company assumes the risk under this arrangement.

- Community development. In some cases (Colstrip, Montana and Wheatland, Wyoming are examples), energy firms have assumed responsibility for providing nearly all of the housing needed by employees, service workers and their families. As stated earlier, the Committee is not supportive of this level of involvement by energy firms unless there are no other alternatives. Such an approach reduces competition in the private housing industry locally, and it leads to "company towns."

SECTION V. RECOMMENDATIONS

The following recommendations developed by the Governor's Advisory Committee are discussed in sequential order with state level recommendations addressed first. The recommendations on housing are grouped separately.

I. Boom Town Designation Standard

Develop a system and criteria for identifying areas likely to experience adverse short term socio-economic impacts from energy development.

There is need for a system to identify communities or areas likely to experience socio-economic impacts from energy development. Once identified, such areas would then become eligible for special financial and technical assistance as outlined later in this section. The criteria listed here should be viewed as suggested guidelines. It is not intended that a community would need to meet them all. A final designation standard should be developed within the appropriate agency or agencies of state government.

- (a) One or more energy-based projects (coal mines, oil shale or coal gasification plants, power plants, uranium mines, etc.) are planned within commuting distance of the potential boom town.
- (b) The combination of construction, permanent and local service (induced) employees expected to reside in the community will cause a significant (for example, 10 percent per year or more) increase in population for a period of at least two years.
- (c) The economic base of the community can be expected to become heavily dependent on new energy-related projects.
- (d) The present population base of the community is less than 50,000.
- (e) An initial analysis of the community's ability to provide public services and facilities indicates problems which go beyond the community's available financial and managerial resources.
- (f) Critically important public facilities, such as water and sewer systems, cannot be readily expanded to accommodate anticipated growth.
- (g) A serious shortage of housing, both permanent and pads for mobile homes, is likely to develop.
- (h) School classroom capacity will be inadequate, in the short run, to handle the additional student load without overcrowding.

II. Energy Impact Assistance Fund

Create an Energy Impact Assistance Fund to provide front-end financing for energy-impacted areas in the state.

One of the key recommendations of the Committee is the establishment of an Energy Impact Assistance Fund to be used to provide various forms of front-end financing for areas meeting the criteria of the boom town designation standard. The Fund would be designed to assist local areas impacted by coal and uranium development, and for oil shale impacts requiring quick response assistance. Major front-end financial needs of communities likely to experience oil shale impacts can be met by the Oil Shale Lease Fund.

The Energy Impact Assistance Fund should be built up over a 10 year period, and it should eventually contain from \$30 to \$50 million.

Recommended sources of monies for the Energy Impact Assistance Fund are:

- (a) Interest from the Oil Shale Lease Fund.*
- (b) All future royalty payments, other than the 37.5 percent already designated, to the state from the Federal Coal Leasing Amendment Act of 1975.

Other possible sources include:

- Proceeds from a coal and uranium severance tax
- Federal aid included as part of a synthetic fuel bill
- Appropriations from the state legislature
- Issuance of bonds or borrowing from the Department of Interior
- Money currently in the Oil Shale Lease Fund

The major uses of the Energy Impact Assistance Fund would be to:

- (a) Make direct loans to local governments.
- (b) Make direct loans for site acquisition, demolition, and utility installations.
- (c) Finance warrants and guarantee bonds issued by local governments.

*This portion of the Energy Impact Assistance Fund should be earmarked for oil shale impacts.

A portion of the Fund should be earmarked for direct grants, matching funds and impact-related emergencies.

The following operational guidelines are recommended for administration of the Fund:

- (a) Financing must be on a timely basis.
- (b) Repayment of loans must also be timely.
- (c) In some cases, loans may contain a forgiveness clause.
- (d) Financial packages are to be individually tailored to fit specific needs and circumstances.
- (e) Loans may be made available at below market interest rates.

Finally, it is recommended that funding decisions be made by a board of seven members, consisting of the following:

- (a) Executive Director, Department of Local Affairs.
- (b) Director of the Energy Impact Financial Assistance Office.
- (c) Five members to be appointed by the Governor.

III. Energy Impact Financial Assistance Office

Establish an Energy Impact Financial Assistance Office in the Department of Local Affairs to provide financial and technical assistance to energy-impacted communities and areas.

The major functions of this office would be:

- (a) Determine eligibility of specific energy-impacted communities or areas using, among other criteria, the boom town designation standard.
- (b) Require the development of "local energy impact committees" to insure coordinated local and industry planning, and to work directly with the Energy Impact Financial Assistance Office.

- (c) Provide technical assistance, (examples, financial contingency planning, housing, social and general economic planning) at the request of energy-impacted communities and areas.
- (d) Upon request, assist energy-impacted communities and areas in developing individually tailored financial packages.
- (3) As part of the financial planning function, identify and monitor potential energy-impact communities and areas; and coordinate state, local, federal and industry plans with Federal Regional Council representatives as an advocate for local government.
- (f) Administer the Energy Impact Assistance Fund.
- (g) Follow-up monitoring of funded projects.
- (h) Coordinate state energy impact programs with federal programs.

The implementation of these functions should be directly coordinated with, and draw upon, the expertise already in place, of the state Department of Local Affairs which encompasses the following divisions: local government, planning, housing, criminal justice, commerce and development, property taxation and the state office of rural development. The Energy Impact Office would be responsible to the Executive Director of the Department of Local Affairs.

The Advisory Committee is opposed to the creation of a large staff for the Energy Impact Assistance Office. The Committee recommends a staff of no more than three or four professionals including at least one person with financial expertise. Other staff members may have expertise in community development, housing, or in special federal and state programs applicable to energy-impacted areas.

IV. Intergovernmental Sharing of the Tax Base

Institute a mandatory system of tax base sharing in those Colorado regions most likely to experience serious socio-economic impacts from energy development.

Given a voluntary system of cooperation in the sharing of tax revenues, the Committee recommends that the Energy Impact Assistance Fund be administered in such a way as to provide incentives for local government cooperation. For example, loans for the construction of hospitals, recreational facilities, airports, detention facilities, vocational schools and street and highway improvements could carry a lower interest rate if the applicants were more than one local government entity (e.g., city and county, or two counties).

The Committee recommends a mandatory system of tax base sharing in those Colorado regions likely to experience serious socio-economic impacts from energy development. The Minnesota Fiscal Disparities Act appears to have applicability, and it should be carefully examined for features that may be relevant to Colorado.

The Committee also recommends that municipalities building, or participating in the construction of new power plants located outside their municipal boundaries, be required to pay normal taxes (or payments in lieu of taxes) to impacted municipalities, counties and school districts.

V. Planning for Energy Development

Make direct grants to energy-impacted communities for the purpose of developing and updating detailed contingency plans in anticipation of public sector financial and housing needs.

The Energy Impact Financial Assistance Office should make direct grants to local government entities, or local energy impact committees, for the purpose of developing and updating detailed contingency plans. These local plans should focus on public sector financial and housing needs in the event various levels of energy development occur.

To insure an adequate amount of lead time to prepare for possible impacts, the Committee recommends complete disclosure, on a timely basis, by each company planning energy development projects in Colorado.

VI. State Energy Policy

Develop a comprehensive state energy policy.

The state energy policy should include consideration of socio-economic impacts, financing of public services and facilities, equity of financial burden and programs for production-consumption-conservation.*

VII. Regional Councils of Government (COG)

Participation of COG's in the establishment of local energy impact committees, and assist in local planning efforts.

Regional COG's should be available to assist local government in the formation of energy impact committees. The COG's should take the lead in making sure that local government entities are aware of potential energy development projects likely to impact the area. They should be a source of technical assistance to local areas in the preparation of financial proposals for funding by the Impact Fund.

The COG's can also play a key role in the equitable distribution of tax base and revenues. In the case of mandatory sharing, they may be a logical entity for administering such a program.

VIII. Federal

Develop a comprehensive national energy policy.

A national energy policy needs to be developed, particularly with reference to synthetic fuel development. It is very difficult, under present circumstances, to develop meaningful plans for dealing with the potential social and economic impacts of oil shale development. There is also a

*A state energy policy statement is currently in draft form.

policy void concerning federal assistance to energy-impacted areas. It is recommended that upon putting leases up for competitive bids, the federal government assign (from the Federal Regional Council) an advocate to work with local communities that may be impacted by energy development; and provide planning monies to the potential energy-impacted communities.

IX. Housing

Stimulate the traditional housing industry to meet the need for temporary and permanent housing.

Local developers and local public housing agencies should be encouraged to assemble land and begin the development process well before population impacts occur. This will enable adequate time to properly plan and zone the land; and allow municipalities (or special districts) time to plan for utilities. The completion of the land use planning and zoning process can trim one to two years from the housing development process.

Local builders should be encouraged to establish joint venture agreements with larger builders. The productive capacity and financial strength of larger builders will be needed to provide adequate quantities of new housing on a timely basis.

Local financial institutions need to establish solid correspondent, or other working relationships, with metropolitan area institutions in order to channel additional mortgage funds into boom towns. Financial institutions also need to work out innovative approaches to the packaging of mortgages for sale to out-of-state institutions.

Local codes and ordinances (zoning, building, housing, subdivision, annexation) should be reviewed for elimination of features that add to the cost of housing, or lead to delays in the timely provision of housing. One element of this review should be consideration of planned unit development (PUD) techniques or other architectural and land use designs that lower the costs of housing.

Maximize the use of federal, state and local housing programs.

Housing and Urban Development-Section 8 is the major federally sponsored housing program presently operating. The formula used to distribute Section 8 allotments should be modified to give priority to energy-impacted areas. There should also be more expeditious processing of Section 8 applications for boom town designated communities.

Farmers Home Administration (FmHA) rural housing programs also should be utilized.

Other federal programs should be reviewed by the State Division of Housing (DOH) with the objective of submitting recommendations to appropriate federal agencies as to how their programs can be made more responsive to energy-impacted areas. The Division of Housing should prepare a concise, understandable presentation of federal programs applicable to rural areas, and be prepared to offer technical assistance in the implementation of those programs. A staff member of the Energy Impact Assistance Office should be involved in this educational process.

Program funds in the Colorado Housing Finance Authority (CHFA) should be set aside for energy-impacted communities, and a capital reserve fund should be created. CHFA should also develop new guidelines relative to income levels, interest rates, collateral requirements and authority to make home improvement loans.

The Colorado Legislature should modify state law to allow the creation of regional housing authorities. This mechanism for providing housing appears to have special applicability in rural areas where lending risks are high. Regional housing authorities can pool loans and spread the risk.

The Governor's Task Force on Housing is urged to consider changes in all state housing programs that will make housing money available to energy impacted areas on a timely basis. The Task Force is also requested to

consider educational programs on housing, aimed at assisting public officials and representative of financial institutions in potential boom towns.

At the state level, additional funds should be earmarked for the Division of Housing grant and loan programs for energy-impacted areas. These programs have special relevance for present residents, especially the elderly and disadvantaged.

Involve energy firms in providing housing, especially for employees.

Where the traditional sources of housing (developers, builders and lenders), in combination with the various federal and state programs, cannot meet housing demand in an energy-impacted area, energy firms have usually attempted to fill the gap. In some cases, the efforts of industry have been critically important in alleviating serious problems; in other cases, industry has been too late to be effective.

The Committee recommends that energy companies become involved in a continuing analysis of housing needs likely to be triggered by sudden increases in employment. At the outset, industry representatives should work with the traditional sources of housing, and with representatives of the various public entities offering housing programs. An analysis of housing supply and demand should indicate whether or not sufficient housing will be available. If it does not appear that adequate housing will be available within commuting range on a timely basis, the energy company should develop alternatives for meeting housing needs.

Some of the alternatives that energy firms may want to consider are: acquiring developable land; site preparation for housing construction; developing mobile home parks; and assisting builders by agreeing to purchase a number of homes at pre-determined prices. The Committee does not recommend that energy firms build "company towns" except as a last resort.

APPENDICES

APPENDIX A SELECTED DATA, SIX CASE STUDIES

1. Low Intensity Development, Energy-Related Projects Likely to Impact Case Study Areas, Present to 1985
2. Medium Intensity Development, Energy-Related Projects Likely to Impact Case Study Areas, Present to 1985
3. High Intensity Development, Energy-Related Projects Likely to Impact Case Study Areas, Present to 1985
4. Comparisons of Annual Revenues and Operating Costs, Six Municipalities, Low, Medium and High Population Estimates
5. Comparisons of Annual Revenues and Operating Costs, Five Counties, Low, Medium and High Population Estimates
6. Comparisons of Annual Revenues and Operating Costs, Six School Districts, Low, Medium and High Population Estimates
7. Comparison of Selected Capital Outlay Requirements and Possible Local Funding Sources, Six Communities, Low, Medium and High Population Estimates (Millions)
8. Comparison of Selected Capital Outlay Requirements and Debt Limit, Five Counties, Low, Medium and High Population Estimates (Millions)
9. Comparison of Capital Outlay Requirements and Two Potential Funding Sources, Six School Districts, Low, Medium and High Population Estimates (Millions)
10. Estimates of Housing Facilities and Future Demand, Six Selected Communities and Their Surrounding Areas, 1970, 1975 and for the Low, Medium and High Population Estimates
11. Estimates of Housing Facilities and Future Demand, Five Counties for 1970, 1975 and the Low, Medium and High Population Estimates
12. Estimates of the Cost of Providing New Housing (and Mobile Home Pads) in the Five Counties - Low, Medium and High Population Estimates (\$ Millions)

APPENDIX A

TABLE 1. LOW INTENSITY DEVELOPMENT, ENERGY-RELATED PROJECTS LIKELY TO IMPACT CASE STUDY AREAS, PRESENT TO 1985

Name of Development (and Sponsoring Organization)	Type of Development	Construction Period	Peak Capacity	Total New Capital Investment (Millions)	Peak Year Employment	
					Construction	Permanent
<u>Oil Shale</u>						
(1) Rio Blanco Oil Shale Project, Tract C-a (Gulf Oil & Standard Oil of Indiana)	Oil shale mine and processing plant	1976-1985	50,000 bbl/day by 1985	\$750	2,200	500
(2) Paraho Oil Shale Demonstration	Experimental program-expansion anticipated	1977-1978	--	50	500	300
(3) Roan Creek Project (Occidental Petroleum)	Research site-expansion likely	1978	5,000 bbl/day by 1979	50	20	240
<u>Electrical Power Plants</u>						
(4) Yampa Project (Colorado - Ute Electric Association)	Coal-fired generating plant	Present to 1984	1,480 megawatts (4 units of 370 MW each)	900	1,000	150
(5) Hayden Project (Colorado - Ute Electric Association)	Second unit of coal-fired generating plant	Completed in mid-1976	415 megawatts (Unit #2 is 240 MW)	150	300	130
<u>Coal Mines</u>						
(6) Utah International Coal Mine	Surface mine-coal used by Yampa Project	Present to 1977	2.0 million TPY by 1979	50	--	250
(7) Peabody Coal Company	Surface mine-coal used by Hayden Project	Present	1.5 million TPY-present	5	--	80
(8) Colowyo Mine (W.R. Grace) and Rail Spur	Surface mine and 28-mile rail spur	1976-1977	3.0 million TPY by 1979	50 in mine 11 in railroad	--	240
(9) Cameo Mine (Public Service Company)	Underground mine-coal used in Cameo Power Plant	1977-1978	0.75 million TPY by 1979	15	--	150
(10) Somerset Mine (U.S. Steel)	Underground mine-metallurgical coal shipped to Utah	None	1.0 million TPY-present	--	--	260
(11) Bear Mine (Arco)	Underground mine	None	0.13 million TPY-present	--	--	40
(12) Hawks Nest Mine (Western Slope Carbon)	Underground mine	1976-1977	1.0 million TPY by 1980	20	--	350
(13) Converse Mine (Colorado Westmoreland)	Underground mine	1976-1977	1.0 million TPY by 1981	20	--	250

Note: Numbers in () refer to map locations.

Sources: A large number of sources were used in arriving at these estimates. BBC has prepared a working paper describing studies reviewed and contacts made in developing this schedule. The approach is described in more detail in the BBC study, Boom Town Financing Study, Volume II, Estimates of Public Sector Financial Needs, Six Western Colorado Communities.

APPENDIX A

TABLE 2. MEDIUM INTENSITY DEVELOPMENT, ENERGY-RELATED PROJECTS LIKELY TO IMPACT CASE STUDY AREAS, PRESENT TO 1985

Name of Development (and Sponsoring Organization)	Type of Development	Construction Period	Peak Capacity	Total New Capital Investment (Millions)	Peak Year Employment		
					Construction	Permanent	
<u>Oil Shale</u>							
(14) Roxana Project Tract C-b (Shell, Ashland)	Oil shale mine and processing plant	1977-1985	50,000 bbl/day by 1987	\$750	2,670	370	
(15) Superior Oil Project	Oil shale mine and processing plant	1978-1986	50,000 bbl/day by 1988	750	1,200	700	
(16) White River Oil Shale Project, Tract Ua (Sun, Phillips, Sonio)	Oil shale mine and processing plant	1977-1986	50,000 bbl/day by 1987	750	2,200	500	
<u>Coal Mines</u>							
(17) Consolidation Coal Mine	Surface and underground mine	1980-1981	3.0 million TPY by 1981	90	--	500	
(18) OMC Mining Company	Surface and underground mine (expansion)	1978-1979	1.0 million TPY by 1981	20	--	300	
(10) Somerset Mine (U.S. Steel)	Underground mine (expansion)	1978-1979	1.5 million TPY by 1979	10	--	140	
(11) Bear Mine (Arco)	Underground mine (expansion)	1978-1980	1.0 million TPY by 1980	25	--	210	

Note: Numbers in () refer to map locations.

Source: See Table 1, this appendix.

APPENDIX A

TABLE 3. HIGH INTENSITY DEVELOPMENT, ENERGY-RELATED PROJECTS LIKELY TO IMPACT CASE STUDY AREAS, PRESENT TO 1985

Name of Development (and Sponsoring Organization)	Type of Development	Construction Period	Peak Capacity	Total New Capital Investment (Millions)	Peak Year Employment	
					Construction	Permanent
<u>Oil Shale</u>						
(19) White River Oil Shale Project, Tract U-b	Oil shale mine and processing plant	1977-1985	50,000 bbl/day by 1986	\$750	2,200	500
(20) Colony Project (Shell, Ashland)	Oil shale mine and processing plant	1977-1981	50,000 bbl/day by 1982	750	3,000	300
(21) Union Oil	Oil shale mine and processing plant	1979-1989	50,000 bbl/day by 1990	750	1,200	500
(22) Occidental Petroleum	In situ oil shale processing plant	1980-1982	40,000 bbl/day by 1984	500	400	200
<u>Electrical Power Plants</u>						
(23) Moon Lake Power Plant (Moon Lake, Utah REA)	Coal-fired generating plant, primarily to provide power for oil shale industry	1977-1987	400 megawatts by 1982 400 megawatts by 1987	500	800	100
<u>Coal Mines</u>						
(24) Moon Lake Mine	Surface and underground mine-coal used by Moon Lake REA Power Plant	1978-1987	1.5 million TPY by 1982	25	50	350
(25) Kemmerer Coal	Surface mine	1981-1982	1.0 million TPY by 1982	12	100	200
(26) Dravo Corp.	Surface mine	1977-1978	1.0 million TPY by 1978	12	100	200
(27) Morgan Coal Company	Surface mine	1980-1981	1.0 million TPY by 1981	12	100	200
(28) Energy Fuels Corp.	Surface mine	1978-1979	2.0 million TPY by 1980	25	--	400
(11) Bear Mine (Arco)	Underground mine	1978-1980	2.0 million TPY by 1980	25	--	150
(29) Coors Mine	Underground mine	1978-1979	0.5 million TPY by 1979	10	--	50
(30) Pittsburg Midway (Gulf Oil)	Underground mine	1979-1980	1.0 million TPY by 1980	25	50	150

Note: Numbers in () refer to map locations.

Sources: See Table 1, this appendix.

APPENDIX A

TABLE 4. COMPARISONS OF ANNUAL REVENUES AND OPERATING COSTS, SIX MUNICIPALITIES, LOW, MEDIUM AND HIGH POPULATION ESTIMATES

	Craig			Rangely			Battlement Mesa			DeBeque			Grand Junction			Paonia		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
A. Operating Budgets (Peak Year)																		
1. Estimated revenues, present tax and fee structure (millions)	\$2.3	\$2.8	\$4.3	\$3.1	\$5.2	\$8.3	--	--	\$2.5	\$0.1	\$0.1	\$0.2	\$12.4	\$14.4	\$16.3	\$0.5	\$0.5	\$1.1
2. Estimated operating costs (millions)	<u>2.2</u>	<u>2.6</u>	<u>3.8</u>	<u>3.2</u>	<u>5.6</u>	<u>8.9</u>	--	--	<u>3.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>	<u>10.7</u>	<u>12.5</u>	<u>14.3</u>	<u>0.5</u>	<u>0.8</u>	<u>1.1</u>
Potential Peak Year Surplus (shortage) - millions	0.1	0.2	0.5	(0.2)	(0.4)	(0.6)	--	--	(0.6)	--	--	--	1.7	1.9	2.0	--	--	--
B. Possible Approaches to Eliminating Shortages																		
1. Mill levy increase*				+13.3	+12.5	+12.3			+24.3									
2. Sales tax increase									+ 1.0%									
3. Additional revenues generated (millions)				\$0.2	\$0.4	\$0.6			\$0.6									

*The current mill levy for Rangely is 27.34 mills; the proposed mill levy for Battlement Mesa is 20.00 mills. The amounts shown are in addition to the present levels.

Source: BBC study, op. cit.

APPENDIX A

TABLE 5. COMPARISONS OF ANNUAL REVENUES AND OPERATING COSTS, FIVE COUNTIES, LOW, MEDIUM AND HIGH POPULATION ESTIMATES

	Moffat County			Rio Blanco County			Garfield County			Mesa County			Delta County		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
A. Operating Budgets (Peak Year)															
1. Estimated revenues, present tax and fee structure (millions)	\$7.8	\$8.5	\$10.3	\$5.9	\$10.4	\$14.6	\$4.2	\$4.9	\$12.4	\$10.6	\$12.3	\$13.8	\$3.7	\$4.4	\$5.2
2. Estimated operating costs (millions)	4.7	5.3	6.7	6.3	8.5	10.9	3.9	4.7	6.1	11.5	13.0	14.7	3.6	4.2	4.8
Potential Peak Year Surplus (shortage) - millions	3.1	3.2	3.6	(0.4)	1.9	3.7	0.3	0.2	6.3	(0.9)	(0.7)	(0.9)	0.1	0.2	0.4
B. Possible Approaches to Eliminating Shortages															
1. Mill levy increase*				1.2						5.5	4.0	3.9			
2. Sales tax increase**				--						--	--	--			
3. Additional revenues generated (millions)				\$0.4						\$0.9	\$0.7	\$0.9			

*Present mill levy is 7.96 in Rio Blanco County and 18.15 in Mesa County.

**A one percent increase in the sales tax in Mesa County would also generate more than sufficient funds to clear up the possible peak year shortage.

Source: BBC study, op. cit.

APPENDIX A

TABLE 6. COMPARISONS OF ANNUAL REVENUES AND OPERATING COSTS, SIX SCHOOL DISTRICTS, LOW, MEDIUM AND HIGH POPULATION ESTIMATES.

	Moffat County District RE-1			Rio Blanco County District RE-4			Grand Valley District 16			DeBeque District 49			Mesa County District 51			Delta County District 50		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
A. Operating Budgets (Peak Year)																		
1. Estimated revenues, present tax and fee structure (millions)	\$ 9.4	\$ 9.7	\$10.7	\$ 2.3	\$ 2.7	\$ 4.2	\$ 1.0	\$ 1.3	\$18.8	\$ 1.0	\$ 1.1	\$ 8.1	\$18.0	\$20.8	\$23.4	\$ 5.8	\$ 7.1	\$ 8.0
2. Estimated operating costs (millions)	<u>4.0</u>	<u>5.0</u>	<u>7.2</u>	<u>4.1</u>	<u>6.9</u>	<u>12.1</u>	<u>0.8</u>	<u>1.3</u>	<u>11.4</u>	<u>0.4</u>	<u>0.4</u>	<u>0.9</u>	<u>19.5</u>	<u>23.1</u>	<u>27.0</u>	<u>6.4</u>	<u>7.5</u>	<u>8.6</u>
Potential Peak Year Surplus (shortage) - millions	5.4	5.7	3.5	(1.8)	(4.2)	(7.9)	0.2	--	7.4	0.6	0.7	7.2	(1.5)	(2.3)	(3.6)	(0.6)	(0.4)	(0.6)
B. Possible Approaches to Eliminating Shortages																		
1. Mill levy increase*				+6.6	+14.3	+18.4							9.8	12.5	17.2	10.0	4.9	6.2
2. Additional revenues generated				1.8	4.2	7.9							1.5	2.3	3.6	0.6	0.4	0.6

*The present mill levy in District RE-4 is 6.45; the levy in Mesa County District 51 is 37.94; the levy in Delta County District 50 is 34.30 mills.

Source: BBC study, op. cit.

APPENDIX A

TABLE 7. COMPARISON OF SELECTED CAPITAL OUTLAY REQUIREMENTS AND POSSIBLE LOCAL FUNDING SOURCES, SIX COMMUNITIES, LOW, MEDIUM & HIGH POPULATION ESTIMATES (Millions)

	Craig			Rangely			Battlement Mesa			DeBeque			Grand Junction			Paonia		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
A. Capital Outlay Requirements																		
(Peak Year)*																		
1. High priority (designated by Boom Town Study Committee)	\$ 0.3	\$ 1.1	\$ 2.7	\$ 4.2	\$ 8.5	\$15.7	--	--	\$10.8	\$ 0.1	\$ 0.1	\$ 0.7	\$ 1.1	\$ 5.9	\$10.3	\$ 1.2	\$ 2.1	\$ 3.5
2. Recreation and administrative	0.0	0.2	0.6	0.5	1.2	2.1	--	--	1.2	0.0	0.0	0.1	0.2	0.6	1.3	0.0	0.1	0.3
Capital Facility Needs	\$ 0.3	\$ 1.3	\$ 3.3	\$ 4.7	\$ 9.7	\$17.8	--	--	\$12.0	\$ 0.1	\$ 0.1	\$ 0.8	\$ 1.3	\$ 6.5	\$11.6	\$ 1.2	\$ 2.2	\$ 3.8
B. Potential Local Funding Sources**																		
1. Water and sewer tap fees (cumulative)****	0.2	0.4	1.2	2.0	3.6	6.1	--	--	6.4	***	***	0.3	1.6	4.2	6.9	0.6	1.2	2.1
2. Debt	1.4	1.7	2.7	1.8	3.0	4.8	--	--	1.8	0.1	0.1	0.1	7.3	8.6	9.8	0.5	0.7	1.0
Potential Local Funding Sources	\$ 1.6	\$ 2.1	\$ 3.9	\$ 3.8	\$ 6.6	\$10.9	--	--	\$ 8.2	\$ 0.1	\$ 0.1	\$ 0.4	\$ 8.9	\$12.8	\$16.7	\$ 1.1	\$ 1.9	\$ 3.1

*There are categories of capital expenditures not included in this analysis. The most important is roads and streets.

**There are other potential local funding sources to pay for capital outlays, such as revenue bonds, an increase in the sales tax, or use of surplus funds from operations, which are not considered in this initial analysis.

***Less than \$50,000.

****Water and sewer tap fee revenue estimates are based on present fee structure.

APPENDIX A

TABLE 8. COMPARISON OF SELECTED CAPITAL OUTLAY REQUIREMENTS AND DEBT LIMIT, FIVE COUNTIES, LOW MEDIUM AND HIGH POPULATION ESTIMATES (Millions)

	Moffat County			Rio Blanco County			Garfield County			Mesa County			Delta County		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
A. Capital Outlay Requirements (Peak Year)*															
1. High priority	\$0.2	\$0.1	\$0.3	\$1.7	\$3.9	\$6.8	\$0.4	\$1.7	\$4.2	\$1.3	\$3.6	\$5.8	\$0.6	\$1.5	\$2.4
2. Recreation and administrative	--	0.1	0.2	0.3	0.8	1.4	0.3	0.5	0.9	0.6	1.0	1.4	0.3	0.3	0.6
Capital Facility Needs	\$0.2	\$0.2	\$0.5	\$2.0	\$4.7	\$8.2	\$0.7	2.2	\$5.1	\$1.9	\$4.6	\$7.2	\$0.9	\$1.8	\$3.0
B. Potential Local Funding Sources**															
1. Debt	3.6	3.7	3.9	4.5	4.5	10.7	1.3	1.4	5.6	2.4	2.9	3.2	0.8	0.9	1.1

*Roads and bridges is the most important category of capital outlays omitted from this analysis.

**Other potential local funding sources for capital outlays include the sales tax and increased mill levies.

Source: BBC study, Op. cit.

APPENDIX A

TABLE 9. COMPARISON OF CAPITAL OUTLAY REQUIREMENTS AND TWO POTENTIAL FUNDING SOURCES, SIX SCHOOL DISTRICTS, LOW, MEDIUM AND HIGH POPULATION ESTIMATES (Millions)

	Moffat County District RE-1			Rio Blanco County District RE-4			Grand Valley District 16			DeBeque District 49			Mesa County District 51			Delta County District 50		
	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High	Low	Medium	High
A. <u>Capital Outlay Requirements</u> (Peak Year)	\$ 2.5	\$ 4.3	\$ 8.2	\$ 5.0	\$11.2	\$21.2	\$ 0.4	\$ 1.7	\$22.2	--	--	\$ 1.1	\$ 2.0	\$ 9.7	\$17.4	\$ 4.8	\$ 8.3	\$11.8
B. <u>Potential Local Funding Sources</u>																		
1. Debt*	48.3	49.1	52.6	55.6	58.4	86.2	2.5	2.9	54.7	4.0	4.0	34.2	30.4	36.6	41.6	11.8	15.5	20.7
2. Capital reserve funds (cumulative)**	4.7	4.8	5.0	6.6	6.7	8.7	0.1	0.4	3.6	--	--	--	5.8	6.5	7.1	2.2	2.7	3.3
Total	\$53.0	\$53.9	\$57.6	\$62.2	\$65.1	\$94.9	\$ 2.6	\$ 3.3	\$58.3	\$4.0	\$4.0	\$34.2	\$36.2	\$43.1	\$48.7	\$14.0	\$18.2	\$24.0

*Gross debt limit, Mesa County District 51 has \$2.7 million in debt outstanding. The other five districts each has less than \$300,000 in debt outstanding.

**Based on current capital reserve mill levy.

Source: BBC study, op. cit.

APPENDIX A

TABLE 10. ESTIMATES OF HOUSING FACILITIES AND FUTURE DEMAND,
SIX SELECTED COMMUNITIES AND THEIR SURROUNDING AREAS,*
1970, 1975 AND FOR THE LOW, MEDIUM AND HIGH POPULATION ESTIMATES

	Year		Peak Year		
	1970**	1975***	Low	Medium	High
<u>Craig Area</u>					
Single family	1,138	1,337	1,538	1,800	2,569
Multifamily	341	503	570	657	913
Mobile homes	119	312	434	585	1,030
Total	1,598	2,152	2,542	3,042	4,512
<u>Rangely Area</u>					
Single family	282	334	984	1,555	2,444
Multifamily	120	120	336	527	824
Mobile homes	88	121	1,705	3,013	4,937
Total	490	575	3,025	5,095	8,205
<u>Battlement Mesa</u>					
Single family	--	--	--	--	920
Multifamily	--	--	--	--	304
Mobile homes	--	--	--	--	2,776
Total	--	--	--	--	4,000
<u>DeBeque Area</u>					
Single family	79	83	87	88	167
Multifamily	6	6	8	8	34
Mobile homes	11	11	40	44	154
Total	96	100	135	140	355
<u>Grand Junction Area</u>					
Single family	5,434	6,076	6,351	7,327	8,165
Multifamily	1,858	3,764	3,855	4,180	4,461
Mobile homes	333	800	1,564	2,063	2,744
Total	7,625	10,640	11,770	13,570	15,370
<u>Paonia Area</u>					
Single family	456	485	697	936	1,201
Multifamily	42	42	112	192	280
Mobile homes	23	23	119	250	447
Total	521	550	928	1,378	1,928

*Generally defined as a five mile radius.

**Based on 1970 Census of Housing information.

***Based on building permit statistics or 1975 housing studies completed in selected cities.

Source: BBC study, op. cit.

APPENDIX A

TABLE 11. ESTIMATES OF HOUSING FACILITIES AND FUTURE DEMAND,
FIVE COUNTIES FOR 1970, 1975 AND THE LOW, MEDIUM AND HIGH POPULATION ESTIMATES

	Year		Peak Year		
	1970*	1975**	Low	Medium	High
<u>Moffat County</u>					
Single family	1,890	1,976	2,016	2,332	3,105
Multifamily	371	533	747	851	1,103
Mobile homes	199	396	570	756	1,246
Total	2,460	2,905	3,333	3,939	5,454
<u>Rio Blanco County</u>					
Single family	1,450	1,512	1,625	2,632	3,905
Multifamily	215	215	555	891	1,310
Mobile homes	216	239	2,820	5,098	7,888
Total	1,881	1,966	5,000	8,621	13,103
<u>Garfield County</u>					
Single family	3,889	5,041	5,728	7,160	8,080
Multifamily	811	1,049	1,192	1,490	1,794
Mobile homes	731	950	1,080	1,350	4,126
Total	5,431	7,040	8,000	10,000	14,000
<u>Mesa County</u>					
Single family	14,986	17,548	17,823	19,963	22,430
Multifamily	2,361	3,779	4,050	6,128	6,923
Mobile homes	1,469	3,603	4,187	4,678	5,261
Total	18,861	24,930	26,060	30,769	34,614
<u>Delta County</u>					
Single family	5,240	5,800	6,119	6,539	6,675
Multifamily	303	800	986	1,348	1,554
Mobile homes	364	900	1,043	1,743	2,485
Total	5,907	7,500	8,148	9,630	10,714
<u>Five County Total</u>					
Single family	27,455	31,877	33,311	38,626	44,195
Multifamily	4,061	6,376	7,530	10,708	12,684
Mobile homes	2,979	6,088	9,700	13,625	21,006
Total	34,495	44,341	50,541	62,959	77,885

*1970 Census of Housing.

**Based on information provided by a number of sources: Current housing studies, county and city building permit data, or trend data based on population growth and local housing trends.

***Proportionate to population growth, and considers projected resident-worker composition.

Source: BBC study, op. cit.

APPENDIX A

TABLE 12. ESTIMATES OF THE COST OF PROVIDING NEW HOUSING (AND MOBILE HOME PADS) IN THE FIVE COUNTIES - LOW, MEDIUM AND HIGH POPULATION ESTIMATES (\$MILLIONS)

	Peak Year		
	Low	Medium	High
<u>Moffat County</u>			
Single family*	\$ 1.6	\$ 14.2	\$ 45.2
Multifamily**	4.8	7.1	12.7
Mobile home pads***	1.0	2.0	4.7
Total	\$ 7.4	\$ 23.3	\$ 62.6
<u>Rio Blanco County</u>			
Single family	\$ 4.5	\$ 44.8	\$ 95.7
Multifamily	7.6	15.1	24.4
Mobile home pads	14.2	26.7	42.1
Total	\$ 26.3	\$ 86.6	\$ 162.2
<u>Garfield County</u>			
Single family	\$ 27.5	\$ 84.8	\$ 121.6
Multifamily	3.2	9.8	16.6
Mobile home pads	0.7	2.2	17.5
Total	\$ 31.4	\$ 96.8	\$ 155.7
<u>Mesa County</u>			
Single family	\$ 11.0	\$ 96.6	\$ 195.3
Multifamily	6.0	52.4	70.1
Mobile home pads	3.2	5.9	9.1
Total	\$ 20.2	\$ 154.9	\$ 274.5
<u>Delta County</u>			
Single family	\$ 12.8	\$ 29.6	\$ 35.0
Multifamily	4.1	12.2	16.8
Mobile home pads	0.8	4.6	8.7
Total	\$ 17.7	\$ 46.4	\$ 60.5
<u>Five County Total</u>			
Single family	\$ 57.4	\$ 270.0	\$ 492.8
Multifamily	25.7	96.6	140.6
Mobile home pads	19.9	41.4	82.1
Total	\$ 103.0	\$ 408.0	\$ 715.5

*The average cost of a single family dwelling unit is estimated to be \$40,000.

**The average cost of a multifamily dwelling unit is estimated to be \$22,300.

***The average cost of a mobile home pad is estimated to be \$5,500. This figure is pad preparation and acquisition only.

Source: BBC study, *op. cit.*

APPENDIX B ANALYSIS, MINNESOTA FISCAL DISPARITIES ACT

This appendix describes key features of the Minnesota Fiscal Disparities Act and its applicability to western Colorado.

Background and Intent of the Act

The purpose of the Minnesota Fiscal Disparities Act is to partially alleviate the financial imbalance, or fiscal disparity, which exists among communities and taxing districts in the seven county Minneapolis metropolitan area. A fiscal disparity occurs when two or more governmental units have unequal abilities to generate revenue. Since the primary source of revenue for local governments is the property tax, the taxable resources available to governmental units are dependent upon the assessed valuation of real property located within the taxing district's jurisdiction. Political fragmentation within a finite geographic area results in arbitrary divisions of the property tax base among governmental units. As a result, when the per capita assessed valuation of real property differs among government units, the locality with a high fiscal disparity (per capita assessed valuation) can tax itself at a low mill levy rate and still generate the same per capita revenue as the poorer municipality at a higher tax rate.

The Minnesota Fiscal Disparities Act guarantees all units of government, cities, towns, school districts, counties and special districts, a share of the region's future growth in the commercial-industrial portion of the property tax base regardless of the location of new industrial development within the seven county area. One of the advantages of the act is that no additional tax is imposed and no new metropolitan taxing districts are formed. Policy decisions on property tax rates remain at the local level. In this manner, no jurisdiction can levy against its share of the region's growth a property tax that it is not willing to levy against its own residents.

Three long-range community benefits of the act are:

- Diminishes importance of fiscal zoning. Fiscal zoning refers to the practice of communities adjusting zoning ordinances to attract certain types of development or discouraging other types of development in order to develop a favorable property tax base. The Fiscal Disparities Act reduces the need for fiscal zoning by sharing the tax base and reducing the fiscal zoning incentives.

- Accounts for increasing concentration of commercial-industrial growth. Strong economic forces are at work to concentrate non-location sensitive business and industry in few large locations rather than being spread throughout the region.

- Evens out the peaks and valleys. Municipalities go through periods of building, maturity and then rebuilding. Capital facility costs are reflected accordingly. The act will help communities through the building and rebuilding development stages where additional financial assistance is most needed and least affordable.

Calculation of Tax Base Sharing

The basic concept of the Fiscal Disparities Act is tax base sharing. None of a community's tax base prior to 1972 is shared. The shared portion is 40 percent of the net growth of commercial-industrial valuation after 1971. A community's valuation is made up of two parts: that which remains local, and that which is shared. Each community's portion of the shared base is determined by its population, but adjusted so that a community will receive a larger share if its property valuation is below the metropolitan per capita average and a smaller share if its valuation is above average.

There are nine basic steps in calculating the amount of shared tax base. The method is described below:

- (1) Determine net growth in commercial-industrial assessed valuation

in each community in the metropolitan area over 1971. Take 40 percent of the result. This is the amount of assessed valuation which each community will share with the entire metropolitan area.

- (2) Add together each community's contribution to the metropolitan pool of valuations to arrive at the total metropolitan pool, and then divide the metropolitan pool among all communities. (The law provides that each community's share shall be based essentially on its population except that communities with assessed valuation below the metropolitan average per capita will receive a slightly larger per capita share and those communities with above average valuation, a slightly smaller share.)
- (3) Determine each community's official assessed valuation for purposes of levying taxes. This is the sum of adding (a) all residential value, (b) all commercial-industrial value, except 40 percent of the growth, and (c) the community's share of the areawide tax base.
- (4) Community determines the amount of dollars it wants to levy on its official assessed valuation.
- (5) The dollar tax levy is divided by the County Auditor in two parts: (a) that which will be raised on the local portion of the assessed valuation and (b) that which will be raised on the metropolitan pool of valuations. The levy is divided in the same proportion as the community's share of the metropolitan pool bears to the local valuation.
- (6) The local levy is divided by the local valuation to arrive at the local tax rate.
- (7) The other part of each community's levy, that is, the levy which will be raised on the metropolitan pool of valuations,

is added together with the comparable levies from every other community to arrive at the total dollar levy on the metropolitan pool of valuations.

- (8) The total levy on the metropolitan pool of valuations is divided by the total value of the metropolitan pool to arrive at the areawide tax rate.
- (9) The tax rates as determined in Steps 6 and 8 above are applied to each piece of property. All residential property has the tax rate as determined in Step 6. For commercial-industrial property, the "local" valuation takes the rate in Step 6, and the "areawide" valuation takes the rate in Step 8.

Minnesota Operation

Although the Fiscal Disparities Act passed the state legislature in 1974, enactment of the concept was withheld until 1975 because of litigation (Village of Burnsville vs. Onischuk, 222 N.W. 2d 523,539 Minnesota 1974). Because the act has only been in operation for less than two years, the results of its operation have not been fully analyzed. However, it appears that the act is working to the extent that it was originally intended. Areas with increasing population bases are benefiting from commercial development outside their jurisdiction. The only major criticism has come, as might be expected, from industrial developers claiming the act encourages irresponsible spending by bedroom communities and discourages development of balanced communities.

Applicability to Western Colorado

The concept of property tax redistribution is not new to western Colorado. Club 20 has advocated a plan similar to that of the Minnesota Fiscal Disparities Act for projects where assessment is likely to exceed \$50 million. The Club 20 plan differs from the Minnesota act in that it is intended to redistribute assessed valuation from large scale energy development, such as oil shale and power plants, whereas the Minnesota plan affects all commercial-industrial property.

Oil shale, coal and power plants are location sensitive by nature. Employees of such operations will live in cities and towns which will not benefit from the assessed valuation increases in rural parts of the county. For this reason, a strong case exists for some means of property tax redistribution to areas adversely impacted in western Colorado.

Edmonton, Alberta is in a similar circumstance to western Colorado. Edmonton is experiencing significant population increases as a result of oil and gas production in the province. The Edmonton area has enacted a plan similar to Minnesota's to redistribute the property tax base from energy related development.

Constitutionality of Property Tax Redistribution

Two questions of constitutionality arise concerning adaptation of a property tax redistribution plan in Colorado. First, Section 3 of the Colorado Constitution provides "all taxation shall be uniform upon each of the various classes of real and personal property located within the territorial limits of the authority levying the tax...". A constitutional amendment or a Colorado Supreme Court decision would be required to answer the question. The same question in Minnesota led to Village of Burnsville vs. Onischuk challenging whether the plan to redistribute the pooled commercial-industrial property throughout the seven county area and the consequent probable difference in tax rates for commercial-industrial property violate the uniformity of taxation clause of the Minnesota Constitution. The Minnesota Court held that the act did not violate the uniformity of the tax provision. The second question of constitutionality involves the Colorado Legislature's lack of power to legislate on matters of municipal and local concern within the areas of a home rule city. Craig and Grand Junction, for example, are home rule cities. Both of these constitutional questions could be overcome by the legislature if a fiscal disparities act were to be adopted.

Summary

The Minnesota Fiscal Disparities Act provides a means for governmental units to share the property tax base of commercial-industrial development

occurring within a finite geographic region. Energy-impacted areas of western Colorado could benefit from similar legislation in Colorado. It is one way of providing funds to municipalities and school districts which experience population increases directly related to the energy development.

Legislation could be written similar to the act in Minnesota to include all commercial-industrial and energy related development constructed after a certain date, or it could be specified to include, for example, only projects with capital investment over \$50 million. Two questions of constitutionality are of concern; however, it appears that they can be overcome.

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