A GROWTH MANAGEMENT CASE STUDY: SWEETWATER COUNTY, WYOMING

-Prepared for-
Rocky Mountain Energy Company
Denver, Colorado

-Prepared by-
John S. Gilmore and Mary K. Duff
University of Denver Research Institute
Denver, Colorado 80210

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Appendix A: The Sweetwater County Boon: A Challenge to Growth Management

Appendix B: The Residents of Sweetwater County, Wyoming: A Needs Assessment Survey
SUMMARY

The Rock Springs – Green River, Wyoming, mining and construction boom is easing, at least temporarily. At the same time, local governments and industry are beginning to anticipate and deal with problems instead of merely reacting to crises.

Furthermore, the Sweetwater County Priorities Board is an innovative means for coordinating programs and avoiding fragmentary efforts. Such coordination and unity seem essential as the county faces continued and increasing industrialization.

The 1971 to 1974 period saw:

1) The quality of life deteriorating as growth in basic industry outstrips the local service sector's ability to provide housing, health services, schooling, retailing, and urban services. As the county population doubled in that time, the many newcomers were not satisfactorily integrated into the community.

2) Industrial productivity declining 25 to 40 percent in mining because of labor turnover and labor shortages. Construction productivity declines, and the local services sector also suffered. The quality of life problems were the basic cause of this. Job satisfaction is high, but large proportions of the newcomers necessary for industrial growth are dissatisfied with life in Sweetwater County to the point of leaving.

3) The local service sector underserving the community in goods and services. The intangible aspects of quality of life were also inadequate for the newcomers swarming in as population doubled in three years. Capital investment in the local service sector—both local government and commercial activity—did not build up adequately, nor did local government revenues.

The three problems have had a triangular relationship. One led to the second, and the second contributed to the third. The third was the basic cause of the first.

Progress and further growth. Although some progress has been made with the problems, further growth is likely. The county's population in the early 1980's is apt to be twice what it now is. All concerned with growth—industry, government, the public—need to examine it and its problems carefully, then to develop the means for dealing with it.

The growth process gone wrong. In the Sweetwater County boom, the markets for the traditional factors of production—land, labor, and capital—haven't performed to accommodate rapid growth and urbanization. The local
services sector of the economy hasn't expanded to balance the basic sector. The quality of life—in both material things and intangibles—has been damaged, and the economy has suffered from that.

Growth management. Since growth so far has neither been self-regulating, profitable, nor pleasant, it must be better managed. This does not mean governmental or industrial control of the regional economy, but cooperative effort to balance growth between basic and local service sectors. Your growth management functions are identified, and tools needed for performing them are listed.

The four functions are:
1) Balancing basic and local service (induced) investment,
2) Affecting resource use and conservation,
3) Developing labor force, and
4) Accommodating and retaining population.

Objectives and an agenda. Growth management depends on objectives. If growth management is to be cooperative, the objectives must be based on a consensus of those expected to cooperate.

Objectives must also be related to threats or opportunities facing the community now and in the future. They must be specific enough to permit measurement of progress.

Then, programs can be designed and carried out to meet the consensus objectives for growth management. A year by year agenda for future actions and decisions should be compiled annually, covering the next five to ten years. This focuses attention on the lead time needed to change zoning, to invest capital, or to seek new legislation.

The last section of the report offers examples of objectives, program packages, and agenda which might be appropriate for Sweetwater County.
SECTION 1. THE SWEETWATER COUNTY BOOM AND
THE PROBLEM TRIANGLE

The boom has (1) degraded the quality of life, (2) reduced industrial productivity and profitability, and (3) demanded more of the local services sector than it could furnish. The three problems are interdependent. Growth will continue, and so will the threat of growth problems. Now, some progress is being made in handling them, and the Priorities Board holds much promise for the future.

Sweetwater County, Wyoming, has been beset with several boom problems born of very rapid, unmanaged growth in economic activity and population.

Industry representatives in mining and construction, the basic sector of the local economy, agree that productivity and profitability have suffered from the boom.*

Local government officials agree that the financial viability of municipalities and schools has been threatened; both capital and operating funds are inadequate. Not only has local government (the public side of the local services sector) suffered, but the private side, e.g., housing, retailing, has also fallen behind booming demand based on a doubling of population between 1971 and 1974. The entire local service sector is underserving the community with goods and services. In addition, the intangible people-supporting activities are no longer adequate.

*Productivity (tonnage mined per man per shift) in trona (natural soda ash) mining dropped 25-40 percent between 1972 and 1973 because of labor turnover and labor supply problems. See The Sweetwater County Boom: A Challenge to Growth Management, Appendix A of this report. It describes these problems, forecasts future developments and population, and recommends problem solving, including a County Priorities Board, a state development authority to assist with housing, and an improved growth management capability.
The public (including industry and governmental officials) agree that the overall quality of life has declined in Sweetwater County with the boom. Newcomers, particularly, find themselves dissatisfied with the community; in fact, a majority threaten to leave if major quality of life problems, e.g., health, public and private services, and housing,* are not promptly solved. Each is a major problem; all of them are related.

Interdependent Self-Sustaining Problems

The three categories of boom-term problems

1) degraded quality of life,

2) declining industrial productivity, and

3) shortfall in the local service sector

are extremely interdependent:

THE PROBLEM TRIANGLE

Degraded Quality of Life

Inadequate supply and stability of labor

Inadequate goods, services and intangibles

Inadequate public revenues and capital, lagging private investment

(63% of property tax revenue and bonding base comes the ten leading industrial taxpayers)

Local Services Fall Short of Need

Declining Industrial Productivity

*See The Residents of Sweetwater County, Wyoming - A Needs Assessment Survey, hereafter called The Survey, Appendix B of this report. It reports a survey of a cross-section of households in the county on their perception of problems, of priorities for problem solving, and on their housing needs and preferences. It was performed by Bickert, Browne, Coddington Associates of Denver, under the direction of Carl Von E. Bickert, and with supplementary analysis by Mary K. Duff.
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<td></td>
<td></td>
<td>High</td>
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</tr>
<tr>
<td>Agriculture</td>
<td>230</td>
<td>230</td>
<td>230</td>
<td>220</td>
<td>220</td>
<td>200</td>
<td>200</td>
<td>200</td>
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<tr>
<td>Mining and processing (including trona, oil, and coal)</td>
<td>1,530</td>
<td>2,020</td>
<td>2,650</td>
<td>4,300</td>
<td>4,400</td>
<td>7,000</td>
<td>8,500</td>
<td>10,000</td>
</tr>
<tr>
<td>Construction (basic)</td>
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<td>--</td>
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<tr>
<td>Power plants</td>
<td>--</td>
<td>--</td>
<td>100</td>
<td>150</td>
<td>175</td>
<td>300</td>
<td>400</td>
<td>700</td>
</tr>
<tr>
<td>Federal government</td>
<td>160</td>
<td>170</td>
<td>170</td>
<td>180</td>
<td>200</td>
<td>250</td>
<td>250</td>
<td>300</td>
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<tr>
<td>Railroad (includes layovers)</td>
<td>300</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>350</td>
<td>200</td>
<td>400</td>
<td>400</td>
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<tr>
<td>Miscellaneous (trade x .1 plus services x .2)</td>
<td>330</td>
<td>400</td>
<td>525</td>
<td>650</td>
<td>700</td>
<td>850</td>
<td>1,200</td>
<td>1,400</td>
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<tr>
<td>Total Basic Employment</td>
<td>2,750</td>
<td>4,470</td>
<td>8,225</td>
<td>7,450</td>
<td>9,645</td>
<td>9,800</td>
<td>14,950</td>
<td>18,000</td>
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<tr>
<td>Construction (local service)</td>
<td>370</td>
<td>405</td>
<td>700</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<tr>
<td>Transportation, communication, and utilities</td>
<td>420</td>
<td>440</td>
<td>650</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<td>--</td>
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<tr>
<td>Trade x .9</td>
<td>1,230</td>
<td>1,550</td>
<td>2,000</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Services x .8</td>
<td>750</td>
<td>900</td>
<td>1,200</td>
<td>--</td>
<td>--</td>
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<td>--</td>
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<tr>
<td>State and local government (including education)</td>
<td>880</td>
<td>1,185</td>
<td>1,300</td>
<td>--</td>
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<td>--</td>
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<td>--</td>
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<tr>
<td>Finance, insurance, and real estate</td>
<td>150</td>
<td>165</td>
<td>200</td>
<td>--</td>
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</tr>
<tr>
<td>Miscellaneous</td>
<td>680</td>
<td>820</td>
<td>950</td>
<td>--</td>
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<td>--</td>
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<tr>
<td>Total Local Service Employment</td>
<td>4,480</td>
<td>5,535</td>
<td>7,000</td>
<td>8,940</td>
<td>10,600</td>
<td>11,760</td>
<td>16,450</td>
<td>18,000</td>
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<tr>
<td>Basic to Local Service Multiplier</td>
<td>1.6</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
<td>1.2</td>
<td>1.1</td>
<td>1.0</td>
</tr>
<tr>
<td>TOTAL EMPLOYMENT</td>
<td>7,230</td>
<td>10,005</td>
<td>15,225</td>
<td>16,390</td>
<td>20,245</td>
<td>21,560</td>
<td>31,400</td>
<td>36,000</td>
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1970 and 1972 employment estimated from U.S. Census and Wyoming Employment Security Commission data; multipliers calculated from these. 1974 and subsequent are DRI estimates based on employer interviews and DRI staff judgments; multipliers estimated by DRI staff.

The assumptions underlying these forecasts are detailed in Appendix A.

The stretchout of the Jim Bridger Plant construction will add to the 1978 construction employment figures by about 1000 in total employment; and population (Figure II) for 1978 Conservative will increase by 3000. This recently announced change is not reflected elsewhere in this report.
This situation will continue to present a self-sustaining cycle unless there is a major change in either:

1) The growth that has generated the problems, or

2) The means of handling growth.

Growth Will Not Go Away

Sweetwater County has the natural resources. There is demand for these resources in national (and possibly international) markets. The limitation on growth in economic activity is the community's ability to accommodate more people.

Growth rates may vary. They have now slowed somewhat from the 1971-1973 compounded annual rate of about 20 percent. Eventually, there may be substantial layoffs of largely transient construction workers as individual projects approach completion. But, as Figure 1 illustrates, growth will continue; if growth rates are employment slumps in the mid-1970's, they will probably rise again in the late 1970's. And even if the rates of growth decline, total employment is expected to continue its increase.

The quality of growth may also change. It will depend more on permanent mining and plant employees (and less on construction), if the newcomers are accommodated.

If growth can be handled, the population (and the outputs of the county) will continue to rise at least into the early 1980's. See Figure II. So it is safe to say that the problems will not go away of their own accord.

Changing the Means of Handling Growth

Therefore, growth needs to be handled differently. The Problem Triangle needs to be broken.
FIGURE II
SWEETWATER COUNTY POPULATION FORECASTS

17,920
18,391
24,007
36,860
39,943
48,873
53,395
76,870
88,875

POPULATION (000)

HIGH
MODERATE
CONSERVATIVE

17,920
18,391
24,007
36,860
39,943
48,873
53,395
76,870
88,875

POPULATION (000)

HIGH
MODERATE
CONSERVATIVE
Progress already made. Substantial progress already has been made. Rock Springs and the county have solved the immediate problem of financing the hospital construction, with state assistance. School bonds are still passing, up to existing bonding limits, across the county. Sewage disposal plant planning is progressing. Green River has bonded itself for public facilities. Planning, zoning, and zoning enforcement are being attempted. Industry has cooperated with money and assistance on a variety of problems. A committee of the Wyoming State Legislature has studied and recommended several new means of problem solving.

Probably the most positive note lies in the establishment of the Sweetwater County Priorities Board, and its counterpart industry association. This local effort at developing new means for handling growth has generated interest and support from state government and industry. It holds promise of mobilizing and coordinating far more resources than have yet been available, and it offers a useful mechanism for helping to apply them.

Broader remedies. However, most of what has been accomplished so far has been reaction to growth crises caused by The Problem Triangle. The boom-type growth process itself is not self-managing or self-moderating. How to break The Problem Triangle raises several questions:

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<td>What is the community economic growth process and how does it work?</td>
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<td>How did this process go wrong in the Sweetwater County boom?</td>
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<tr>
<td>Why did The Problem Triangle develop?</td>
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<tr>
<td>Can boom-type growth be managed to improve the community and to make higher growth rates tolerable?</td>
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• What tools can be used for effective growth management?
• What are the roles of the Priorities Board, local government, industry, and the public in growth management?

The remaining sections of this report address these questions.
SECTION II. THE GROWTH PROCESSES

In the Sweetwater County boom, the markets for the traditional factors of production—land, labor, and capital—haven’t performed to accommodate rapid growth and urbanization. The local service sector of the economy hasn’t expanded to balance the basic sector. The quality of life— presently both material things and intangibles—has been damaged, and the economy has suffered from that.

The Rock Springs-Green River, Wyoming, boom is a case in which the traditional processes regulating economic growth haven’t worked well. The market mechanisms which are supposed to furnish the factors of production* and smooth the growth or decline in production haven’t performed their function.

The Market Mechanisms

The conventional economic wisdom assumes that when major new capital investments were made in Sweetwater County (for production of soda ash, electricity, coal) the markets for the other factors of production would respond. The labor market would supply the needed employees. The land and materials markets would supply those inputs. The capital market would permit the financing of housing for the new employees and their families, and of facilities to supply goods and services like education, streets and highways, and health facilities.

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*The factors of production are land, labor, and capital, according to most economic theory. A market exists for each factor, and determines the supply and price of each factor. Land (M) includes land and materials, and, in this case, combinations of these into productive plant. Labor (L) is the people who gather, combine, or convert M. Capital (I) is the investment capital required to obtain M and L, from their respective markets and to assemble them into product (P), which is then sold to maintain the process. Thus, production is a function of the amounts and proportions of the factors, or expressed mathematically, P = f(M,L,I).
This increased demand for these factors might push local prices up a little (including wages, the price of labor), but presumably the needed things would be available. Presumably the growth processes would work satisfactorily, controlled and assisted by the markets for the factors of production.

The situation before the major new capital investment and the idealized situation after plant construction are shown in Figures III and IV respectively.

The Stable Situation

A stable or slowly growing community is depicted in Figure III.

The factors of production in the basic sector. Basic capital ($I_b$) has been invested in land and materials assembled into an existing stock of productive plant and facilities ($M_b$) and in working capital to keep material inputs flowing through the plant. This employs basic labor ($L_b$).

The local economy's basic or "export" sector produces goods and services which are sold elsewhere, e.g., to national markets. In return for those "exports," basic income and purchasing power is imported and is distributed locally through local wage payments and purchases.* This purchasing power supports the local service sector, until it "leaks" back out of the local economy as retailers restock their shelves, and money is spent elsewhere.

The factors in the local service sector. Similarly, local service capital ($I_l$) has been invested, resulting in both public and private facilities ($M_l$) producing goods and services for the local population. This employs local service labor ($L_l$).

*In a small community with a wealthy population, e.g., Aspen, Colorado, income from property or investments elsewhere is also a source of basic purchasing power. In a suburban community, much of the basic income may come from those commuting to employment in the central city.
FIGURE III
THE STABLE SITUATION

NATIONAL MARKETS

PRODUCT

MAKE POSSIBLE,
SUPPORTS, USES
MARKET DEMAND,
REQUIREMENT

BASIC

I_B

M_B

L_B

GOODS & SERVICES

ADEQUATE

POPULATION

LOCAL SERVICE

I_L

M_L

L_L

LOC SERVICE

GOODS & SERVICES
PUBLIC, PRIVATE
UTILS UTILITIES
SCHOOLS RETAILING
SAFETY MISC.
HEALTH SERVICES
GOVERNMENT HEALTH
HOUSING
INTANGIBLES
RESPONSIVENESS, SENSE
OF COMMUNITY,
LEISURE ACTIVITIES

P= F(M,I,L)
I=INVESTMENT CAPITAL
M=LAND & MATERIALS
(SOMETIMES CONVERTED INTO PLANT)
L=LABOR
Q=QUALITY OF LIFE
local service activities include those largely provided by local
government, e.g., education, streets and highways, public safety, welfare,
mental health, and usually sewer and water service. Many other local ser-
vice activities are largely furnished by private businesses, e.g., retailing,
personal services, energy and telecommunications, and construction—including
housing. Health services are largely furnished through private physicians
and other practitioners and public hospitals. Other social support services
are furnished less formally by churches, voluntary associations, clubs,
and friendly people.

Labor and population. Except for commuters, labor, both L_4 and L_1, is
largely drawn from the local population (i.e., people living in the community);
the laborers—in all occupations—support the households making up most of
the local population with their incomes. Thus, L_4 and L_1 support the local
population, but the lasting availability of L_4 and L_1 depends on a large
dough, stable enough local population. They are mutually dependent.

Basic to local service relationships. In the stable or moderate growth
(up to five percent annual growth rate) situation, the local services are
generally those desired and affordable by the population. Capital to furnish
new local service facilities (including housing) is usually available from
various investors, barring national upsets in capital markets.

For each employee in basic industry, there are usually from one to two
local service employees in a typical, stable, small Rocky Mountain community;
thus, the basic-to-local-service multiplier is from 1 to 2. And in a stable
or slowly growing community, the local services sector can be expected to
grow (both L_4 and L_1) in appropriate proportion to growth in basic L and L.
A sudden change in this multiplier is apt to signal a change in the quantity of goods and services available to the population, and thus in the material aspects of the quality of life (Q).

The quality of life. The quality of life, Q, of the entire population depends on two things:

- **Tangibles (1):** The adequacy of the goods and services available and affordable in the local service sector; and
- **Intangibles (2):** The morale and attitudes of the population depending on such things as adequate leisure activities, responsive government and a supportive spirit of community.

### Major Addition of Basic Plant Investment

Then, to start a growth situation, corporate (or governmental) decisions are made for new or incremental major capital investments $\Delta I_b$. These are used to construct and operate new basic plants $\Delta N_b$. This represents a large increment or addition to the stock of basic capital in the community. It will also require additional employees $\Delta L_b$ for both construction and operation. These increments $\Delta$ are shown added to the existing basic sector in Figure IV.

The additional employment will bring more population ($\Delta$ population). The build-up of construction employment (and related population) may be very fast. Much of it will probably come in from outside the community. Some of it may be hired away from jobs already in the community, interfering with existing basic and local service activities.

In any case, the new population must be accommodated; the local service sector must expand to do this. If these needs are to be met, additional
FIGURE IV
MAJOR ADDITION OF BASIC PLANT INVESTMENT

\[ P = F(M, I, L) \]
\[ I = \text{INVESTMENT CAPITAL} \]
\[ M = \text{LAND \& MATERIALS} \]
\[ L = \text{LABOR} \]
\[ Q = \text{QUALITY OF LIFE} \]

**makes possible, supports, uses**

**market demand, requirement**

Q \hspace{2cm} LOCAL SERVICE
GOODS & SERVICES
PUBLIC UTILITIES
PRIVATE UTILITIES
SCHOOLS
SAFETY
HEALTH
SERVICES
GOVERNMENT
HEALTH
HOUSING

Intangibles
Responsiveness, Sense
of community, leisure
activities, integration
of newcomers

adequate

\[ \Delta \text{POPULATION} \]

\[ \Delta \text{PRODUCT} \]

\[ \Delta \text{GOODS \& SERVICES} \]

\[ \Delta \text{L} \]

\[ \Delta \text{M} \]

\[ \Delta \text{I} \]

NATIONAL MARKETS

LOCAL SERVICE

BASIC

LOCAL SERVICE

Q

POPULATION

adequate

\[ \Delta \text{POPULATION} \]
local service capital investment $\Delta l_1$ is induced (or required) by the basic investment. Local service employment $\Delta l_1$ also needs to be expanded to maintain levels of service. These $\Delta l_1$s are shown in Figure IV.

The ideal case. Even in a small community, large increments to population can be accommodated, if the $\Delta l_1$, the additional local service capital, is invested in timely fashion. However, not only must $\Delta l_1$, $\Delta M_1$, and $\Delta l_1$ be combined to furnish additional local service goods and services, but all of the intangibles plus another intangible must be assured to maintain quality of life. The additional intangible is integration; new population must be integrated into the established community as they arrive and as they desire.

If the population attracted by the new jobs resulting from $\Delta l_1$ (and from $\Delta l_1$) can be accommodated while maintaining quality of life, adequate labor, both $l_0$ and $l_1$, will be available. Additional product can be produced and exported as planned, and this should lead to adequate returns on the $\Delta l_0$--the additional basic investment.

Even in this ideal case, there may be a problem in getting adequate returns on the new local service investment $\Delta l_1$ if it was built up to accommodate a one-shot construction increment with an ensuing drop off (see previous

*The induced local service capital investment ($\Delta l_1$) required to maintain quality of life apparently may be from five percent to 20 percent of the new basic investment ($\Delta l_0$), depending on the type of plant being built. Accommodating the construction force and related population on a power plant where $\Delta l_0$ is $500 million may require $30 to $50 million, depending on housing arrangements. The $\Delta l_1$ requirement for the permanent operation (including local coal mining) is apt to require $20 million. Up to half of $\Delta l_1$ is in public facilities.

The $\Delta l_1$ requirement to balance a $\Delta l_0$ of $800 million in a more labor intensive coal gasification plant will be from $90 to $140 million during the construction phase. The $\Delta l_1$ requirement for permanent operation will run $70 to $90 million. (All of these very rough estimates are in 1974 dollars.)

The contrast between $\Delta l_1$ requirements for the construction phase and for the operating phase raises questions about the desirability of dispersing plant construction among different communities, each of which then has to go through the cycle of expansion and contraction. An argument can be made for concentrating such industrial activities, phasing the construction to avoid such sharp peaks and valleys.
(footnote). This raises the issue of who should pay for such investment, the employers of the construction force, the permanently existing tax base, or some combination of the two.

**Unbalanced Growth**

On the other hand, major new basic investment $\Delta I_b$ which is not balanced by adequate and timely $\Delta I_1$ is inevitably upsetting. See Figure V.

If the local service sector cannot expand adequately its facilities and employment and output of goods and services to meet increased demand, there is less for everyone. This in itself degrades the material quality of life $Q$ even as prices and rents are being driven up. If the intangibles in $Q$ also are less satisfactory, both old and new population suffer.

As quality of life $Q$ declines, people are more apt to leave, and the labor supply shrinks, relative to demand. If the labor supply $L_0$ and $L_1$ is less adequate to meet labor demand, productivity suffers in both basic and local service sectors.

This briefly describes what happened in the Sweetwater County boom 1971-1974, the creation of The Problem Triangle described in Section 1. The markets for the factors of production didn't function to smooth out growth.

Information was lacking for timely $\Delta I_1$ local service investment. Had the information been available, the investment might or might not have been sought. The capital markets might or might not have supplied the money. However, timely investment was not made, and local service goods and services, both public and private, fell behind. As private activities lagged
FIGURE V
UNBALANCED GROWTH

NATIONAL MARKETS

BASIC

MAKE POSSIBLE
SUPPORTS, USES
MARKET DEMAND
REQUIREMENT

PRODUCT

? I

M M

LOCAL SERVICE

GODS & SERVICES

PUBLIC UTILITIES
PRIVATE UTILITIES
SCHOOLS
SAFETY
GOVERNMENT
HEALTH
HOUSING

INADEQUATE
OR INAPPROPRIATE

RESPONSIVENESS, SENSE OF COMMUNITY, LEISURE ACTIVITIES, INTEGRATION OF NEWCOMERS

POPULATION

P = f(M, I, L)
I = INVESTMENT CAPITAL
M = LAND & MATERIALS (SOMETIMES CONVERTED INTO PLANT)
L = LABOR
Q = QUALITY OF LIFE
\[ \Delta = \text{INCREMENT} \]
demand, more was asked of the public sector—local and state government—but its resources are limited by rigorous limitations on bonding capacity and on flexibility in taxation. Furthermore, if the boom is perceived temporary, with a decline to follow, voters are hesitant to vote for bonds. The new population was not adequately accommodated with either the tangibles or the intangibles of Q, quality of life. Additional population was not adequately housed and integrated into established communities. Thus, the labor market did not function. Employee turnover increased and recruitment of new employees was inadequate. Productivity suffered* in both the basic and local service sector.

Conclusions

One conclusion from the Sweetwater County experience is that quality of life Q is as important as the three factors of production M, L, and I in this case. In a remote community which must attract and retain labor L from elsewhere, Q may be a factor of production.

Since quality of life Q depends on the availability of local service labor L₁ (plus the other factors and intangibles), L₁ must be considered and planned for along with basic labor L₅. It is as necessary to satisfactorily house and serve local service-related population as the population supported by basic industry. The entire community must be developed, not merely the industrial segment.

*The survey showed high job satisfaction (including income and future prospects), but extreme dissatisfaction with such 3 items as health services, housing, and recreation, leading to willingness to leave the community. This was most true among the newcomers who must be attracted and retained if growth is to continue.
Finally, the growth in Sweetwater County was not zoned so much as it was unmanaged. The adjustments to growth were left up to market mechanisms that did not or could not work. Almost every segment of the community suffered, plus the outside investors in $\Delta H$.

The alternative is a conscious effort at growth management by all the parties at interest to growth.
SECTION III. GROWTH MANAGEMENT

Since growth has neither been self-regulating, profita-
able, nor pleasant, it must be better managed. This does
not mean governmental or industrial control of the local
economy, but cooperative effort to balance growth between
basic and local service sectors. Four growth management
functions are identified and tools needed for performing
them are listed.

Growth management, as conceived here, does not mean centralized control
of economic activity and growth, either by a government agency or an indus-
trial firm or group.

Growth management does involve generating enough cooperation among the
groups and persons involved to develop the economic, political, and social
tools needed, and to use them to implement consensus solutions to these
questions:

Where should growth be located?
What should the rate of growth be?
How should the benefits of growth be shared?
How should the costs of growth be paid for,
and who should pay for them?
How can the parties at interest to growth be brought together to manage growth?

The answers to these questions, if representing consensus, can be ex-
pressed as sets of objectives, some of which are specific enough to measure
performance by. Examples of such hierarchies of objectives are given in the
following section. The remainder of this section will describe basic functions
of growth management, based on the model of the growth process. It will also
list some of the tools and mechanisms needed for carrying out the functions.

*The parties at interest to community growth management include
industry, state, local, and federal government, commercial interests, the
public, etc.
Growth Management Functions

The functions are those needed to manage the community growth process described earlier, acknowledging some undefined limit on tolerable rates of growth. The limit is not known, but in the unmanaged growth situations described earlier, an annual growth rate of ten percent strains local service capabilities. Fifteen percent to 20 percent seems to cause breakdowns in local and regional institutions, e.g., the housing market, the labor market. Quality of life then declines, and this affects industrial operations which depend on a stable and satisfied work force.

Good growth management can help avoid the seemingly intolerable rates of growth. It can also substantially raise the ceiling of what growth rates are tolerable, if the costs and intangible needs are met.

Given the existence of this uncertainty about the limits of growth, the essential functions appear to be these:

1. Balancing Basic and Induced Capital Investment
2. Affecting Resource Use and Conservation
3. Developing Labor Force
4. Accommodating and Retaining Population

The applicability of these functions (and the need for all of them) is depicted in Figure VI.

1. Balancing Basic and Induced Capital Investment

Induced capital investment in local service facilities \( \Delta I_1 \), including housing, must be adequate to accommodate increased population resulting from the incremental investment in basic plant \( \Delta I_b \).

*Calculating and estimating this limit, under conditions of good growth management, is beyond the scope of this project.
FIGURE VI
GROWTH MANAGEMENT FUNCTIONS

LOCAL SERVICE

BASIC

AFFECTING RESOURCE USE & CONSERVATION

LOCAL SERVICE

ACCOMODATING RETAINING POPULATION

GOODS & SERVICES

PRODUCT

DEVELOPING LABOR FORCE

POPULATION

ADEQUATE

NATIONAL MARKETS

MAKES POSSIBLE, SUPPORTS, USES MARKET DEMAND, REQUIREMENT

P = R(M, L, I)
I = INVESTMENT CAPITAL
M = LAND & MATERIALS
L = LABOR
Q = QUALITY OF LIFE
X = INCREMENT
One way to balance the two types of investment is to augment the availability of induced, local service investment capital. Another is to limit the magnitude or rate of basic capital investment.

Either way, balancing requires open communication between investment decision makers in the basic sector and those in the local service sector. The Sweetwater (Wyoming) County Priorities Board is an innovative basis for monthly meetings between elected officials and citizens (representing the local service sector) and basic industry representatives. This mechanism requires an industry organization (i.e., The Southwest Wyoming Industrial Association) and staff for the Priorities Board.

Time lags between identifying the induced capital need \( I_1 \) and having money in the bank is a particular problem in financing schools, sewers, and housing. Twelve to 36-month periods are common. The corporate basic investor must give maximum advanced notice to the local services sector if he wishes good growth management. He may even find it necessary to defer or cancel investment \( I_2 \) if it appears that balancing local service investment is not available.

The ratios between basic investment and induced investment will probably vary substantially. A coal gasification plant will be more labor intensive than a coal fired steam electric plant; it will therefore require more induced investment (see footnote in previous section). Further research as to what these ratios might generally be is desirable.

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*The decision in 1974 by Idaho Power to not build an additional Sweetwater County electric power plant, fueled by coal from Black Buttes is an example of this.
Following are tools or means of affecting both basic and induced capital investment so they may be reasonably balanced, and of affecting the communication needed for balancing:

### Means of Affecting Rate of Basic Capital Investment

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>Encouragements</th>
</tr>
</thead>
<tbody>
<tr>
<td>plant site planning laws</td>
<td>industrial development bonds</td>
</tr>
<tr>
<td>plant site control laws</td>
<td>loan guarantees</td>
</tr>
<tr>
<td>industry-specific taxes</td>
<td>accelerating depreciation (industry-specific)</td>
</tr>
<tr>
<td>policies or taxes encouraging out-of-region processing of resources</td>
<td>income tax credits (industry-specific)</td>
</tr>
<tr>
<td>impact statements</td>
<td>government construction of plants or facilities</td>
</tr>
<tr>
<td>permit or impact fees</td>
<td></td>
</tr>
<tr>
<td>zoning</td>
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</tbody>
</table>

### Means of Affecting Rate of Induced Capital (Local Service) Investment

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>Encouragements</th>
</tr>
</thead>
<tbody>
<tr>
<td>low bonding limits</td>
<td>public facility grants</td>
</tr>
<tr>
<td>low assessment ratios</td>
<td></td>
</tr>
<tr>
<td>high land prices</td>
<td>public facility loans</td>
</tr>
<tr>
<td>lack of state or federal financial aid</td>
<td>exemptions or increased bonding limits</td>
</tr>
<tr>
<td></td>
<td>&quot;pay-as-you-grow&quot; tap fees and permit fees</td>
</tr>
<tr>
<td></td>
<td>state development authority (i.e., Wyoming Comm. Dev. Authority)*</td>
</tr>
<tr>
<td></td>
<td>company-assured housing</td>
</tr>
<tr>
<td></td>
<td>joint-powers (multi-government cooperation) legislation*</td>
</tr>
<tr>
<td></td>
<td>local flexibility in taxations, including income taxes</td>
</tr>
<tr>
<td></td>
<td>industry loans to local service entities</td>
</tr>
</tbody>
</table>

*Growth management tools recommended to the Wyoming State Legislature by its Select Committee on Industrial Development Impact (the Ostlund Committee), December 1974. In the authors' opinion, this package is an impressive effort to identify growth problems, determine means or estimate costs for solving them, and recommend remedial legislation. The estimates of costs and the allocation of taxes to the beneficiaries of growth are proper matters for legislative review, but the approach seems exemplary.
Means of Affecting Communication Between Sectors

**Deterrents**  
- traditional industry views that most information is proprietary
- closed or nonparticipative local government budgeting
- inadequate local government planning
- uncertainty about federal land and resource policies
- inadequate coordination and cooperation among units of government

**Encouragements**  
- joint industry-government problem-solving (the Sweetwater County Priorities Board)
- industry and citizen participation in local government budget preparation
- joint industry-government local planning staff
- voluntary industry disclosure of tentative investment and site planning
- legislation requiring environmental impact and community impact statements
- industrial site control legislation requiring information
- industrial site control legislation requiring justification
- aggressive press coverage of local economic and political activities

2. Affecting Resource Use and Conservation

Land use has been regulated to some extent by state governments for 50 years, water use longer. Both affect the specific location of various economic activities. State regulation to maintain air quality and water quality has more recently been mandated by federal legislation. States are increasingly

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*See footnote on previous page.

** Fees charged to new industry by local government to cover costs, and required by statute or by contract as condition for rezoning or construction permit, as done by Skagit County, Washington, and Puget Sound Power and Light Company.
legislat ing controls on mining and land reclamation practices. Traditional state-fixed mineral production quotas (ostensibly for resource conservation but also concerned with price maintenance) are currently out-of-vogue. Minerals taxation affects the economics (and thus the extent) of minerals recovery.

Among the tools for this growth management function are:

**Means of Affecting Resource Use**

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>Encouragements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• zoning (exclusionary)</td>
<td>• zoning (permissive)</td>
</tr>
<tr>
<td>• preserve agricultural or other existing uses by zoning or tax</td>
<td>• release public lands</td>
</tr>
<tr>
<td>• emission and effluent Regulations</td>
<td>• ease transfer of water rights and acquisition of uncommitted water</td>
</tr>
<tr>
<td>• complex source and non-degradation regulations for air quality</td>
<td>• &quot;Industrial development&quot; standards of air quality</td>
</tr>
<tr>
<td>• siting controls</td>
<td>• differential tax rates, favoring production of certain minerals or qualities of minerals</td>
</tr>
<tr>
<td>• use quotas (grazing or logging public lands)</td>
<td>• control of annexations, municipal incorporations and formation of special districts</td>
</tr>
</tbody>
</table>

3. Developing Labor Force

Balancing of labor supply and labor demand is important, along with balancing basic and induced capital investment. Both are difficult during fast growth. The labor supply in a boom community generally depends on the community's ability to attract labor and accompanying households from other, competing labor markets. Secondarily, labor supply depends on local industry and government's ability to increase the labor participation rate, to attract, train, and retain a greater proportion of those already living in the area. This includes women, senior citizens, minorities, and handicapped.
On the demand side, balance may be achieved by seeking to minimize labor requirements. More off-site construction work may be done outside the region, both in basic plant construction (e.g., electrical and piping sub-systems) and in local service construction (e.g., manufactured modules for buildings and housing).

**Tools include:**

### Increase Supply and Utilization of Labor

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>Encouragements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• limit local service investment discouraging attractiveness of community compared to others</td>
<td>• develop and maintain attraction capability, e.g., attractive wages and career opportunities, quality of life adequate to build up population and labor force</td>
</tr>
<tr>
<td>• fail to maintain intangibles in local area</td>
<td>• training programs</td>
</tr>
<tr>
<td>• comparatively lower wage scales (than mining construction) for local government employees</td>
<td>• local affirmative action activity</td>
</tr>
<tr>
<td></td>
<td>• day care to encourage women participation</td>
</tr>
<tr>
<td></td>
<td>• relocation allowances</td>
</tr>
<tr>
<td></td>
<td>• longevity (on job) bonuses</td>
</tr>
<tr>
<td></td>
<td>• competitively attractive job security or income security</td>
</tr>
</tbody>
</table>

### Affect Demand for Labor

<table>
<thead>
<tr>
<th>Deterrents</th>
<th>Encouragements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• encourage off-site construction to be done outside area</td>
<td>• encourage local mineral processing and conversion</td>
</tr>
<tr>
<td>• discourage processing or conversion of extracted minerals</td>
<td>• encourage induced capital investment ( \Delta I )</td>
</tr>
<tr>
<td>• limit expansion of local service employment by discouraging induced capital investment</td>
<td></td>
</tr>
</tbody>
</table>
4. Accommodating and Retaining Population

Growth in economic activity generally requires more labor. If the growth is to be lasting (and profitable), a substantial part of the labor must be willing to settle in the community. In most cases (certainly in the Rocky Mountain Region), this requires accommodation of the additional "employees' families.

Finally, successful accommodation of new families requires adequate local services and amenities,* comparable to those the same families could find in other communities with comparable employment opportunities. Many of these local services and amenities depend on adequate induced local service capital investment ΔI1.

Examples of tools are:

<table>
<thead>
<tr>
<th>Population Accommodation and Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deterrents</strong></td>
</tr>
<tr>
<td>Failure to encourage</td>
</tr>
<tr>
<td>(opposite column) and</td>
</tr>
<tr>
<td>failure to manage growth</td>
</tr>
<tr>
<td>during boom are major deterrents</td>
</tr>
<tr>
<td><strong>Encouragements</strong></td>
</tr>
<tr>
<td>• adequate wages and career opportunities</td>
</tr>
<tr>
<td>• housing at affordable prices, lease-</td>
</tr>
<tr>
<td>purchase agreements with employer</td>
</tr>
<tr>
<td>financing</td>
</tr>
<tr>
<td>• health services</td>
</tr>
<tr>
<td>• adequate education, recreation,</td>
</tr>
<tr>
<td>leisure time activities</td>
</tr>
<tr>
<td>• safety and security</td>
</tr>
<tr>
<td>• newcomer integration into the community</td>
</tr>
<tr>
<td>• make land continuously available</td>
</tr>
<tr>
<td>for housing to avoid monopolistic pricing</td>
</tr>
<tr>
<td>• easy access to participation in</td>
</tr>
<tr>
<td>community affairs</td>
</tr>
</tbody>
</table>

*The provision of adequate local services and amenities requires additional local service employees, too. Their families must be accommodates, too. It is not sufficient to merely attract and retain basic (construction and mining) employees and their families.
SECTION IV. HIERARCHY OF OBJECTIVES LEADING TO PROGRAM PACKAGES
AND A DECISION AGENDA

Growth management depends on objectives. If growth management is to be cooperative, the objectives must be based on consensus of those expected to cooperate. Objectives must also be related to threats or opportunities facing the community, and must be specific enough to permit measurement of progress. Then, programs can be designed and carried out to meet the consensus objectives for growth management.

Boom problems exist in Sweetwater County because the growth process hasn't worked satisfactorily. The institutions traditionally expected to automatically regulate growth haven't performed at boom-type growth rates. On the other hand, the four functions of growth management are known and many tools to carry them out are identifiable. How are these to be used?

If growth is to be managed to achieve what the community, including industry, wants—the community's objectives—what are objectives? Where do they come from?

Objectives. Objectives may be expressed as abstract good intentions, but they become useful only as they are more specifically stated. To be operationally useful, they must describe, often quantitatively, a situation which solves (or is solving) a problem or which achieves (or is achieving) an opportunity.

An objective may reflect a time deadline; it may acknowledge the limitations from conflicting policies, goals, or institutions; and it may be a combination of several objectives. A useable operational objective statement must permit one to tell whether or not the objective is being achieved. The operational objective also should be clearly related to broader goals.
Objectives are not isolated. They are easily achievable only when a structure or hierarchy knits them together. Such a hierarchy is presented later in this section with hypothetical examples of objectives for Sweetwater County. Real objectives must be developed by community consensus with broad participation by all parties at interest to growth.

Objectives by consensus. Sweetwater County has a head start in determining its consensus, its broad agreement among the different parties at interest. It has the Priorities Board which, with strong citizen participation, is well set up to decide what the hierarchy of objectives should be and to guide implementation programs for achieving them.

The broad consensus, however, is vital. Consensus objectives, and the consensus-making process, are an important supplement to the limited police power and budget power of local government. The more who participate in the consensus, the more who are influenced by it.

Committees, hearings, and meetings are conventional objective-setting approaches. With the addition of neighborhood caucuses, of present and improved mass media capabilities, and of present and new polling and feedback techniques,* a well-publicized public consensus would be:

Democratic
Restorative of social cohesion
Moderating of overzealous advocates, and
A vital input to growth planning and management, influencing public and private decisions.

*Described later under the Detailed Operational Objective for improving quality of life Q.
Roles in growth management. Much emphasis is placed on consensus, including the public. This enhances cooperative and voluntary growth management, rather than unilateral use of the police power or of economic power. The roles of the different parties at interest in various growth management activities are outlined in Figure VII.

The Hierarchy

Examples of a hierarchy or structure of objectives follows:

Growth management policy

A grand goal - a statement of good intentions.

Threat

General statement of the problem, of the activities generating the threat to the Grand Goal.

Between 1970 and 1974 Sweetwater County has been growing at a 19 percent annual growth rate, more than doubling its population. Industrial investment in expansion of existing plant or creation of new plant has been the primary cause of this growth. The rate and magnitude has created a disruptive boom situation in the community. Given the national energy crisis and growing international markets for natural soda ash, resource development in Sweetwater County will provide the basis for continued rapid growth for at least another 20 years (with a projected range of between 53-89,000 by the early 1980's.)

Threat Response Policies

General policy statement responding to specifically described threat, or otherwise authorizing response.

To maintain a viable community, better accommodating population and thus improving productivity in a competitive regional labor market; to see that the social and public costs of growth are borne equitably and that inequitably borne growth costs not be incurred.

**National Environmental Policy Act, Sec. 101 (b) (5).
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<tbody>
<tr>
<td>Public (through advisory groups, etc.)</td>
<td>Suggest and review</td>
<td>Review</td>
<td>Review</td>
<td>Review, modify, and support</td>
<td>Review and approve</td>
<td>Review and approve</td>
<td>Review</td>
</tr>
<tr>
<td>Priorities Board and staff</td>
<td>Collect consensus</td>
<td>Research, forecast, and define</td>
<td>Collect consensus</td>
<td>Propose</td>
<td>Propose</td>
<td>Propose</td>
<td>Prepare, coordinate, and evaluate</td>
</tr>
<tr>
<td>Local gov. and industry officials</td>
<td>Suggest and review</td>
<td>Review</td>
<td>Review</td>
<td>Review, modify, and adopt</td>
<td>Review and approve</td>
<td>Review and approve</td>
<td>Implement</td>
</tr>
<tr>
<td>State government; legislation or decisions</td>
<td>Observe</td>
<td>Observe</td>
<td>Observe</td>
<td>Observe and advise</td>
<td>Observe and advise</td>
<td>Observe, advise, and assist</td>
<td>Review</td>
</tr>
</tbody>
</table>

FIGURE VII.
ROLES IN GROWTH MANAGEMENT ACTIVITIES
Operational Threats

Actual or potential problem, more precisely defined, for which remedial policies are being sought.

The local services sector of Sweetwater County lags far behind demand for services; the fiscal viability of local government (a critical factor in providing local services) is threatened; these then become primary factors in the degradation of quality of life experienced by residents since 1971. This is evidenced by the collapse of the housing and health services market, by increased crime, divorce, and alcoholism rates, and by overcrowded sewer systems and school facilities. The inability to maintain community "liveability" has led to reduced industrial productivity and thus profitability as labor becomes dissatisfied and often leaves the area. Increased competition with other resource development regions, e.g., Powder River, North Dakota, for employees and population will further threaten Sweetwater County's ability to attract labor.

Operational Objectives

Indicator of desired achievement - written to describe a desired state of nature where the Threat exists only at an acceptable level.

To stabilize the county growth rate at between 7 to 10 percent annually or at the highest rate tolerable under good growth management; to stimulate expansion of both public and private local service so that within three years the basic to local service multiplier equals 1.6 (pre-boom relationship); to return to 1971 levels of productivity for trona and coal mined per unit per shift; to achieve by 1979 slack capacity in public facilities (particularly water, sewer) that will accommodate an immediate incremental population of 15,000 and commensurate capability for rapidly adding 100 classrooms.

To restore community quality of life to desirable level of "liveability." An attitudinal survey (similar to that in Appendix B of this report) taken in 1977 should indicate (1) only five to seven percent of respondents would expect to leave the area despite a stable employment situation; (2) 80-90 percent would declare the community is improving or positively stabilized; (3) 65 percent would desire to remain in the area for the rest of their lives, and by 1979 achieve 80-90 percent willingness to stay in the community; and (4) given a list of services to compare with former places of residence, Sweetwater County should be ranked equal or above satisfaction on at least half.
Operational Threat Response
Policy Categories

Categories of remedial policies in response to Operational Threat and Operational Objectives.
Such policies are guides to choosing and defining Detailed Operational Objectives. They also would affect current decision-making (see Agenda examples for 1976 and 1978).

1. Increase the comparative advantage of Sweetwater County as: (1) an enjoyable place for the individual and family to live and work; and (2) a profitable area in which to do business.
2. Assure governmental institutional capabilities (including fiscal and capital structure viability) to accommodate growth.
3. Encourage a public-private partnership approach to managing growth which involves maximum citizen participation.
4. Distribute the public and social costs of growth equally among the beneficiaries of that growth.

Detailed Operational Objectives

Indicators of desired achievement written to describe a state of nature where the Threat exists only at an acceptable level.

Program Packages

Sets of program components (projects and implementation tools) which together will achieve the Detailed Operational Objective.

Detailed Operational Objectives (DOO's) may be numerous and will necessarily address a variety of problem areas. It is important they be determined by community consensus. The objective setting process using broad citizen participation helps generate solutions, sometimes alternatives (program packages) for achieving the objectives, and often indicates priorities for action.

The following list of Detailed Operational Objectives is a hypothesized, partial list of examples; it is presented here simply for purposes of demonstration.

Specified on pages 37-40.

Exemplified on pages 41-56.
The objectives reflect the authors' judgments (based on interviews and the survey) of what might result from an actual consensus objective setting process by Sweetwater County citizen representatives, elected officials, and industry spokesmen.

The Detailed Operational Objectives are interdependent, just as the problems they deal with are interdependent. See The Problem Triangle in Section 1. They must all fit together within the hierarchy of goals and objectives. (These cover the Operational Threat Response Policies.) They must all be achieved if the goals, objectives, and policies are to be met.

The Detailed Operational Objectives are interdependent. They must all fit together within the goals and objectives. They must all be achieved if the goals and objectives are to be met.

**Detailed Operational Objectives**

**D00 1.** Completion of the new Sweetwater County Hospital on schedule, and adequate clinical facilities, physicians, and other staff to provide quality health services within maximum time limits and within agreed upon cost limits, with fixed milestones of progress showing partial accomplishment by September 1975. (An actual Detailed Operational Objective should be prepared under the direction of the Priorities Board by March 1975; the information and expertise available through Sweetwater Health Services, Inc., should be particularly helpful. Such an objective might include recruiting specialists, providing housing for medical staff, and creating a drug treatment and prevention service through Sweetwater Counseling Service, and establishing outpatient clinics in Reliance and/or Superior.)
DOO 2. The Sweetwater County Priorities Board should be the catalyst for an undertaking generating up to 4,000* units of detached single unit housing constructed and available between now and the end of 1977, of a quality augmenting Q the Quality of Life. If Jim Bridger Power Plant unit #5 (or equivalent, but not Sorena cast as on page 4, Appendix 1) construction is not underway, at least 2,000 such units should be made available by the end of 1977. Sixty percent of these houses should be available for sale with monthly payments not exceeding 20 percent of the average trona miner's income (est. $1,125/mo.), or $225 per month in 1974 dollars. Another 20 percent (which may not be detached single units) should be available to those employed in the local service sector with rental or purchase payments of $175 per month.

DOO 3. Additional grade separations (between streets and rail tracks) are needed at both Green River and Rock Springs on the Union Pacific main line; one additional separation is needed for each city by the end of 1976. A grade separation over the Union Pacific northbound line from Rock Springs will be needed at Grant Street by the time two or more unit trains of coal are running daily.

DOO 4. Wastewater treatment facilities now under study for Green River and Rock Springs should be completed by 1977, with continuing planning for

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*This figure is derived from Table III, p. 13, Appendix A, and was determined by adding the 1974 housing deficit plus 75 percent of "mobile home spaces needed," plus 100 percent "incremental site homes needed." The necessity to include 75 percent of mobile homes here as permanent homes reflects information from The Survey (Appendix B). Survey results indicate a substantially higher proportion of individuals desire permanent homes than had been assumed by the authors in calculating Table III prior to administering the survey.
satellite facilities in rural areas and for growth in the larger settlements.

DOO 5. A joint county-towns sanitary landfill operation should be equipped and working by 1976.

DOO 6. Augmentation of a County Services staff with a nucleus of present professionals, but including an expansion of sanitarians, building inspectors, planning, budgeting, public administration, grand applications, and engineering specialists available to all local government (some loaned personnel from industry may be included). A committee of towns' and county staff should prepare an actual DOO of needs and methods of sharing personnel.

DOO 7. The costs, revenues, and capital improvements plans for all major units of government should be on a five-year planning basis by 1976. By 1979, all major units of government should have adequate sources of revenues and capital under Wyoming statutes and constitutional provisions then in existence to accommodate steady growth. Tax incidence should be designed so that the net costs of growth are borne by the beneficiaries of growth.

DOO 8. By fall of 1977, construction and availability of several small community centers should be underway. These would be used for adult and youth activities and offer any or all of the following: movie theater, bowling lanes, pool hall, indoor and outdoor swimming pools, skating rink, tennis courts, meeting rooms. Some of these facilities should be built and owned by private enterprise and might be contained under one roof (for instance, a complex including swimming, bowling, and restaurant/lounge facilities might be built in conjunction with a golf course).
DOO 9. Establish a level of community support system which assist rapid integration of newcomers into the community and activate revitalized interest on the part of long-time residents in community affairs. A survey similar to The Survey (Appendix B) administered in fall of 1978 should indicate: (1) a higher percent of long-time residents and Rock Springs and Green River residents perceive the quality of life in the community to be improving; (2) 25-30 percent of respondents should regard "neighborhood or community" to be one of the most rewarding aspects of life in Sweetwater County; (3) on a comparison of services such as that listed on page 31, Appendix B, recreation facilities, friendliness/acceptance in the community, a place to raise children, community planning, parks, responsiveness of local government, and outdoor recreation should be ranked "better" by a majority of respondents; and (4) county average score on Harris's Alienation Scale would be 2.2 with minimal variance between newcomers and long-time residents.

DOO 10. Generate agreement between local government and industry on common (or compatible) legislative lobbying programs on matters of local concern, e.g., the package of bills proposed by the Oakland Committee, a position on establishing a medical school in Wyoming, passage of the Uniform Immoderation and Treatment Act.

This is not an attempt to prepare a complete list of objectives—that is the responsibility of local officials and interested citizens. The crucial thing is to make them detailed and specific enough to plan for, to budget for, and to achieve. Since the most important may be the most difficult to express and to accomplish, it is dangerous to slight any of those chosen.
Program Packages

Program packages to achieve each objective should be prepared and
should be reviewed yearly. Part of the review process is for revision, to
deal with what's new. Part is for evaluation, to see how it's going and
what else must be done.

Two examples of program packages follow:

Housing Program Package - DOO 2

New legislation required to achieve the Housing Detailed Operating
Objective includes:

1. The Wyoming Community Development Authority bill (Senate File
   No. 12, 1975) should be passed with its "loans to lenders"
   provision.

2. The Bill Organic Act, now pending before Congress, should be
   enacted in a form reinstating the 1964 Act authorizing sale of
   government lands to municipalities (and/or local housing authori-
   ties) for resale for housing development in impacted areas.*

3. Wyoming should adopt legislation setting up a countryside regu-
   latory group controlling annexations and the formation of cities
   and new special districts, similar to California's Local Agency
   Formation Commission (LAPCO) for "... discouragement of urban
   sprawl and the encouragement of the orderly formation of local

*Such legislation would permit municipalities to add to the supply of
land for housing and also to limit its price. In the Ft. McMurray, Alberta,
boom, the provincial government releases predeveloped land as demand forces
prices up beyond the reach of local home buyers. The released land in each
case is located adjacent to developed land, thus facilitating orderly develop-
ment. Municipal purchase (and predevelopment) of raw land from private sources
could have the same effect.
government agencies based upon local conditions and circumstances,"


Assuming that these are enacted, with strong lobbying support from the
Sweetwater County community, there are several phases in the process of
reaching the objective:

Planning, land acquisition, predevelopment, and early financing. An
early choice must be between scattered developments (annexable), a single
annexable development, or a socially and economically cohesive new community.

Any of these can theoretically offer the tangible and intangible amenities
necessary for adequate quality of life, during a period of growth and in-
migration of newcomers. A satellite or housing-only suburb, lacking public
and commercial facilities, is unlikely to offer this basis for community
integration; the wholly new community may have similar problems unless it is
complete. Access to employment and service centers and to existing utilities
will affect both public and private costs.

The town of Green River may have available the land needed for the first
year's increment of houses from its early BLM purchase. Other, conventional
sources include Upland, the Westerly development, and other private landowners,
and BLM land if it is again made available through the revised Organic Act.

The land acquisition or assembly may be financed by a developer, by a
consortium of lenders, or with participation by local industrial firms (which
may or may not be interested in subsidizing the acquisition or controlling
the cost of the land).

Predevelopment may be partially financed by the proposed Wyoming Community
Development Authority if land is annexed and the utilities and streets are
built as public facilities. Wyoming Farm Loan Board funds can go into water.

sewage, and solid waste facilities via the Joint Powers Act. More conventionally, predevelopment may be financed by the developer.

Front end financing for construction may be obtained from private lenders, or from industrial firms concerned with the quality of life in Sweetwater County.

Purchase finance. If 7-1/2 percent purchase financing is available from the Wyoming Community Development Authority (or some other source), a $35,000* house (stick-built or manufactured) can be bought with a $3,000 down payment and $225 a month payments—this may or may not meet the price limitation in the Detailed Operational Objective for housing. An alternative is direct subsidy of housing construction, purchase, or rental by industry or government (a Sweetwater County Housing Authority may be helpful). There will still remain the problem of financing the equally vital housing for local service employees of lower income who cannot afford the down payment or the monthly payments. Other alternatives for lowering the purchase price include incomplete interior finishing and little or no effort at landscaping (although the latter is considered highly important, according to The Survey, p. 27, Appendix B).

Employers may finance second mortgages to assist their employees with down payments. They might sell housing to their employees on a purchase contract, with buyback of an inflation-adjusted equity if the employee

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*Building costs are estimated to be in the $23-28 per square foot range, based on 1974 experience of a large, successful builder in the Rocky Mountain region.
leaves the employer. Both are alternatives to permit employees of large firms to buy housing.

The remaining 20 percent of the housing units to be meet the quota will presumably be higher priced housing, conventionally financed. Mobile home spaces will probably be adequately available as construction employment drops off. The poorer mobile home parks will then suffer competition from better facilities, and all will be upgraded by stronger local enforcement of zoning, health, and building standards.

Housing Program Package Financial Notes

The order of magnitude of financial requirements for 1975 for this undertaking, based on both the 1978 high population estimates and the 1978 conservative estimates (p. 13, Appendix A),** follow.

*A similar plan is in effect at Ft. McMurray, Alberta.

**The essential difference in these estimates is that the high assumes continued power plant (or similar) construction after Jim Bridger Unit #4 is completed; the low merely assumes continuation of present trona and coal mining expansion.
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Housing Program Package Financial Notes

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*A similar plan is in effect at Ft. McMurray, Alberta.

**The essential difference in these estimates is that the high assumes continued power plant (or similar) construction after Jim Bridger Unit #4 is completed; the low merely assumes continuation of present trona and coal mining expansion.
<table>
<thead>
<tr>
<th>Description</th>
<th>High Estimate</th>
<th>Conservative Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permanent housing units needed in 1975, to meet 1978 requirement</td>
<td>1,000</td>
<td>500</td>
</tr>
<tr>
<td>Units requiring financial assistance</td>
<td>800</td>
<td>400</td>
</tr>
<tr>
<td>Cost of developed land (raw land &amp; S1,500–3,000/s) and utilities,</td>
<td>$10-15 million</td>
<td>$5-7.5 million</td>
</tr>
<tr>
<td>including treatment plans plus collection and distribution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Funds potentially available from WCDA for public facilities (pre-</td>
<td>($3 million)*</td>
<td>($1-1/2 million)</td>
</tr>
<tr>
<td>development). About one-fourth less land would be needed if water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>facilities were provided privately.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other public facilities and buildings (including schools)</td>
<td>$2-8 million</td>
<td>$1-4 million</td>
</tr>
<tr>
<td>(these costs depend on access to existing facilities with spare capacity)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction financing (private)</td>
<td>$2-5 million</td>
<td>$2-4 million</td>
</tr>
<tr>
<td>Purchase financing (WCDA loans to lenders for 7-1/2 percent mortgages)</td>
<td>$26,000,000**</td>
<td>$13,000,000</td>
</tr>
</tbody>
</table>

*The funds needed from the proposed Wyoming Community Development Authority for just the first year of a three-year program make up a substantial part of its proposed $100 million bonding capacity.

**It is possible that the 20 percent local service housing described in the Housing Program Package might qualify for assistance under Section 8 of the Housing and Community Development Act of 1974 for annual contributions for moderate income families to rent housing. If the Department of Housing and Urban Development clarifies its regulations and if funds are available to Wyoming or from the Secretary's discretionary funds.

The present role of the Farmers Home Administration is unclear to us. It theoretically is a source of both home ownership and public facilities loans and its authorizations were extended by the Community Development Act of 1974.
Program Package to Enhance Intangible Aspects of Quality of Life - DOO's 8 and 9

A. Countywide outreach campaign
B. Countywide recreation program
C. Expanded communication role for electronic media
D. Western Wyoming College expansion of adult education and career development opportunities.

Background. The growth management model described on pages 11-26 defined quality of life in terms of (1) tangible elements (adequacy of goods and services available and affordable in the local services sector) and (2) intangible elements such as supportive spirit of the community, responsive government, and adequate leisure time activities. While Detailed Operational Objectives 1-7 deal primarily with the tangible aspects of quality of life, DOO's 8 and 9 attempt to achieve and measure improvement in the intangible aspects of quality of life.

In The Survey, alienation— the feeling of powerlessness to change one's environment—was consistently related to individual mobility and was minimal in people with high involvement in community activities. For example, individuals with short time expectations of remaining in the area had higher than average scores. Highly mobile individuals (i.e., those who have moved a number of times in the last few years) had the highest alienation scores of any subgroup analyzed, whereas individuals who have never moved had very low alienation scores.

This merely emphasizes the fact that individuals who move about a great deal never put down roots which allow them to become established in a community and thus have a voice in its direction. Consistent with that conclusion is the finding that individuals who described themselves as involved in community activities had significantly lower scores than those people who claimed little or no involvement in community affairs.
Personal satisfaction with life is directly related to alienation; survey respondents with low alienation scores exhibited the highest level of satisfaction of any subgroup analyzed. High levels of personal commitment were also found among individuals who expect to remain in the area for the rest of their lives, long-time residents, and people who consider themselves to be highly involved in community affairs.

These results indicate a program package designed to achieve detailed Operational Objectives 8 and 9 should emphasize expanding opportunities for attaining a high degree of personal satisfaction among Sweetwater County residents. The feeling of permanence—of having "put down roots" in the community—appears to be crucial to this. Availability of permanent housing increases the perception of permanence among individuals. Involvement in community affairs not only helps retain an individual and family in the community, but also increases the sense of personal worth and thus satisfaction.

Involvement and integration in the community may take a multitude of forms from friendly "across the back fence" visits with neighbors to campaigning for elected office. There are a multitude of activities between these extremes, and an initial program package designed to retain active, permanent, satisfied citizens might contain the following components:

A. Countywide outreach campaign.
B. Countywide recreation program
C. Expanded communication role for electronic media
D. Western Wyoming College expansion of adult education and career development opportunities.

These components are designed to augment one another; thus to achieve community commitment on the part of most Sweetwater residents, they must be implemented as a unit.
Component A: Countywide outreach program. A countywide outreach program would serve several purposes: (1) to inform residents of services and activities available in the community, (2) to attract new members to volunteer organizations, and (3) to encourage formation of new friendships.

A telephone referral service should be established and widely publicized in the local media. The service would provide information on social services available in the community (health care, babysitting, family counseling, suicide prevention, etc.), and also which governmental agency to contact for specific problems (trash collection, employment, welfare). A complete listing of leisure time activities—recreation programs and facilities, volunteer civic associations, cultural, religious, and educational groups—should be available.

Development of community centers helps bring people together. Often a community center—or the need for one—acts as a stimulus to formation of neighborhood organizations. Governmental planning efforts to identify neighborhoods and work with people in each area often give rise to neighborhood associations. These associations are effective catalysts for citizen involvement and feelings of community identification.

Major employers in the area can facilitate integration of newcomers with orientation sessions bringing together old and new employees and their families. Picnics, interindustry team sports, bridge clubs, and a "partners" approach to orienting new employees (including wives' partnerships) all assist integration efforts. Employers might also recognize community involvement on the part of employees by giving awards for special efforts such as coaching a little league team, being a Boy Scout leader, serving on the cancer drive committee, or volunteer tutoring.
Another technique would be a coordinated membership drive of all volunteer organizations in the county. Every group should join together in a month long, well-publicized campaign to generate interest and new members. This would include civic organizations (Women's Club, League of Women Voters, Junior Chamber of Commerce), cultural, recreational, and hobby clubs (theater groups, museum memberships, garden club, gun club, snowmobilers), and service organizations (Parent-Teacher Association, Kiwanis, church groups, Girl or Boy Scouts, Red Cross). Such a drive might even motivate people to organize a club or group which doesn't exist presently; for instance, some parents might want a volunteer probation officer program, or perhaps some elderly people would want to begin a "Gray Panthers" organization.

Volunteerism offers a unique opportunity for personal satisfaction and simultaneously meets otherwise unattended community needs. Federal funding under ACTION is available to encourage and coordinate volunteer activities in a community. One program of particular interest to Sweetwater County is ACTION Technical Assistance in which federal funds are available for matching volunteers with special technical expertise with small business or not-for-profit organizational needs.

The county might also consider funding establishment of a Commission on Community Relations. Citizens Advisory committees to such a commission would examine new approaches to creating a personally satisfying quality of life for Sweetwater residents. To examine alternatives and report their findings, the CAC might use the ports-pak community television approach described in Component C.

Component B: Countywide recreation program. The Priorities Board Citizens Advisory Committee should establish a volunteer task force to prepare
a program package for attaining detailed Operational Objective 8.* This objective is a long-range goal; it will require both public and private investment and might take a variety of forms.** The Program Package therefore will require consideration of incentives to private entrepreneurs, use of industrial development bonds, etc.

The task force might also prepare an interim plan for recreation and leisure time activities to be completed by May 1975 for presentation at the county budget hearings. If the county would take the initiative to form a countywide recreation district, employing staff to organize and direct recreational programs for the entire population, an effective program could be in operation by fall of 1975. The Wyoming Recreation Commission might fund part of this.

With full-time staff available to assure maintenance and protection of facilities, more extensive public use of existing facilities would be possible. For example, school gymnasiums could be opened for adult sports, and/or church basements might substitute as youth centers.

A recreation director would initiate activities such as little league or teen clubs and also assume responsibility for coordination of youth oriented activities with those for adults (such as bridge tournaments).***

*Again, a well-advertised request for volunteer would give otherwise uninvolved residents an opportunity to participate in a personally relevant project.

**if, for instance, private entrepreneurs opened a restaurant/lounge in Green River or a large recreational complex, it would help to achieve DOO 8, but would not reduce the need for continued public planning towards parks, community centers, tennis courts, etc.

***In group interviews with women, complaints surfaced regarding the difficulty of successfully organizing youth activities such as little league. However, it was pointed out that usually these efforts concentrated on
Close cooperation with Western Wyoming College in planning activities such as yoga classes, volleyball tournaments, sewing clubs, etc., would be mutually beneficial.

A countywide program would also allow the staff to build a constituency. As people became more involved and new activities were begun, they might be motivated to seek private support for building new facilities to help achieve Detailed Operational Objective 8.

Component C: Expanded role for electronic media in fostering community commitment. The electronic media (video and audio) can be powerful forces in encouraging broad citizen participation in community affairs and activating community resources. A number of communities throughout the United States and Canada are experimenting with innovative uses of the electronic media to foster such interest and involvement.

The key to these activities is feedback—reaction, comment, criticism, participation. Feedback mechanisms—whether by telephone or group discussions in a community viewing center—allow local residents to react to material presented.* This feedback produces input for future programming and assures relevance to the local citizenry.

Broader application of existing local cable systems and radio stations as a community resource might include locally originated programming from Western Wyoming College for educational purposes such as seminars with guest speakers, classes such as handicrafts or mechanics, and student theater productions.

assimilating children in isolation from attempts to assimilate the parents into community life. A program director would be concerned with assimilating families through a wide variety of activities.

*A schoolroom, library, neighborhood bar, or an individual’s home may become a community viewing center when the porta-pak video tape is shown to groups via a home TV set.
Social service agencies (public and private) might produce informational programs regarding their activities. City council or county commissioner meetings might be broadcast. The Sweetwater County Historical Society might offer programs on past history of the county. These programs should be carried on the cable systems and wherever appropriate, live feedback via the telephone should be included.

As an extension to these activities, a community videotaping project might be undertaken. Such a project uses new technology—the portable videotape cameras (porta-pak)—which permits easy production of television-type pictures by anyone.

The porta-pak is easy to operate, relatively inexpensive equipment which allows the layman to visit the “nooks and crannies” of the community, interview individuals or groups, and produce tapes (the substance of which may vary from the secret of Chinese cooking to survival in the desert). The tapes are then reproduced on local television stations, cable systems, or individual home sets located in churches, schools, libraries, or a neighbor’s home.

As an initial project, a community videotaping effort might develop a Sweetwater County community profile designed to:

- Introduce newcomers and oldtimers to each other, individually and as groups;
- Share different perspectives on the community and its needs, to get reaction to these perspectives, and to put perspectives and reactions together in visual documents;
- Inform and entertain both the participants and the audience attracted by the localized video material;
- Begin the community objective-setting-by-consensus process.
The project would have local citizens putting together their talents and interests to picture their views of Sweetwater County and their concerns.

The (1) creation of these visual documents and the (2) reactions to them in public meetings or as telephone conversations between viewers, producers, and commentators is a whole new experience in assembling diverse ideas from people. It is in a new form that stimulates more ideas and more participation.

Because operation of the equipment is easy to learn and because porta-pak tapes may be shown wherever a television set is located, the opportunities for widespread participation in both production and feedback is maximized. Thus, both the creation of a video community profile (or a document or a single issue) and the subsequent discussion generate intense interest. Experience elsewhere in the U.S. and Canada indicates that response and participation grow, including many who usually took no part in local activities.

There are two prerequisites for this program:

1. Equipment and training — supportable by a grant from industry or the Wyoming Council for the Humanities, probably to Western Wyoming College.

2. Operating base and sponsorship — Western Wyoming College; sponsorship might be shared with a volunteer association in the county.

Component D: Western Wyoming College expansion of adult education and career development opportunities. Western Wyoming College provides unique opportunities as a center for increasing personal satisfaction. Survey results indicated 35 percent of respondents were "extremely interested" or "quite interested" in attending classes at the College. Newcomers and respondents who expected to remain in the area one to five years showed the greatest interest.
A countywide bus system should be in operation in time for spring classes, and the planned day-care center (also offering services in the evenings) should be constructed and available as soon as possible.* The county might consider leasing three or four minibuses to service Green River, Superior, Reliance, and outlying areas with schedules coinciding to heavy demand for classes. A cooperative babysitting pool of students--coordinated through the College--might facilitate attendance for women.

These transportation and babysitting difficulties reinforce the need for WWC acting as a center for the community video concept discussed in Component C of this program package. After having taught the use of porta-pak, students could show tapes of various subjects in the churches or schools of outlying areas--thereby reducing the need for transportation services. Additionally, as a "Know your Neighbor Program" residents of the outlying areas, having once learned the operation of the porta-pak, could produce their own tapes for distribution and discussion in Rock Springs and Green River.

A further role for WWC is suggested by (1) the lag in private local services sector build-up and (2) women's dissatisfaction with career opportunities in the county.** If WWC were to undertake an active business management program and enlist women for the program, the women might be motivated to open small business operations in the county. Women entrepreneurs might join together to open restaurants, lounges, or a variety of retailing shops. Front end money might be provided by a Sweetwater County equity fund, and other capital from the sale of Wyoming Industrial Development bonds.

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*According to the survey, aside from lack of free time, the major inhibitors to attendance were poor driving conditions, inadequate transportation, and lack of babysitting facilities.

**The survey indicated that women in the rural areas ranked second in high alienation scores.
Summary

Again, this program package is designed to facilitate newcomer integration and reactive long-time resident interest in community affairs. The goal is an enriched quality of life for Sweetwater residents. Measuring success will often be difficult, even with surveys, due to the intangible nature of the objective. Also, much of the success depends on individual friendliness and willingness to participate—this cannot be legislated.

It is thought, however, that simultaneous initiation of (1) the process of developing and discussing a Sweetwater County community profile; (2) a membership drive to recruit new member volunteers; (3) greater access to WWC services; and (4) a countywide recreation program will create a snowballing effect of community involvement leading to increased personal satisfaction.

It should be noted that involvement and commitment are best achieved from the grassroots up. As people themselves articulate problems, discover solutions, and help implement projects, commitment and integration thrive.

The complexity of this and the variety of programs suggest the Priorities Board should consider hiring a Director of Community Development as the first step in achieving an enriched quality of life.*

Enhancing Intangible Aspects of Quality of Life—Financial Notes

The order of magnitude of financial requirements for a single year for this undertaking follows. These are annual operating costs, with no capital investment immediately required (except as noted).

*This person would coordinate and monitor the quality of life programs, and would deal with the program leadership, the Priorities Board, and the others financing the programs.
Telephone referral service $ 35,000
Neighborhood planning personnel in existing planning offices 35,000
Selective grants to organizations for membership drives 10,000
Commission on Community Relations 35,000
Recreation program for utilizing existing facilities 115,000
Electronic media program (includes one-time cost of $25,000 for equipment) 65,000
Western Wyoming College programs 200,000
Equity funding for small businesses (repayable grants) 50,000
Director of Community Development 45,000

$610,000

The Agenda

The agenda for decision-making suggests the order in which decisions should be made to achieve actions as they are needed.

The forecasts of employment* and population in Section I set up the assumptions about the future. The hierarchy of objectives states what is desired. The program packages describe the specific means of reaching the objectives. The agenda is a reminder that decisions and action will be taking place over time, with different accomplishments requiring differing amounts of lead time.

If the objectives offered earlier as examples were those actually determined by local consensus, the following are some of the data, circumstances, and decisions which would need to be considered.

*The forecast and the alternative sets of assumptions affecting future employment should be critically reviewed and revised every other year.
<table>
<thead>
<tr>
<th>Plants:</th>
<th>CONSERVATIVE ESTIMATE</th>
<th>HIGH ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>under construction:</td>
<td>one new trona</td>
<td>more, plus fifth unit of Jim Bridger</td>
</tr>
<tr>
<td></td>
<td>four trona one coal</td>
<td>one additional coal mine</td>
</tr>
<tr>
<td>operating:</td>
<td></td>
<td></td>
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<tr>
<td>Employment:</td>
<td>construction:</td>
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<tr>
<td></td>
<td>1,600</td>
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<td></td>
<td>4,450</td>
<td>4,575</td>
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<tr>
<td></td>
<td>8,940</td>
<td>10,600</td>
</tr>
<tr>
<td>Population:</td>
<td>Total</td>
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</tr>
<tr>
<td></td>
<td>School children:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>39,943</td>
<td>48,873</td>
</tr>
<tr>
<td></td>
<td>11,305</td>
<td>13,741</td>
</tr>
<tr>
<td>Total school rooms required:</td>
<td>452</td>
<td>550</td>
</tr>
<tr>
<td>Incremental school rooms required:</td>
<td>37</td>
<td>98</td>
</tr>
<tr>
<td>Total permanent housing units required*:</td>
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<td>6,878</td>
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<tr>
<td>Incremental permanent housing units required:</td>
<td>2,697</td>
<td>3,429</td>
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<tr>
<td>Incremental mobile home pads required:</td>
<td>212</td>
<td>337</td>
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<tr>
<td>Estimated revenues to county from ad valorem tax on trona, coal production - ?</td>
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<td></td>
</tr>
<tr>
<td>Estimated revenues from property tax - ? (residential, commercial, industrial)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*See note, page 38, for assumptions.
**Assumes state has increased bonding limit by 1975 legislative recommendations, i.e., passage of constitutional amendment doubling debt limit of cities, counties, and school districts.
• With higher bonding capacities available (and being used), review of debt structure and costs should be maintained. Operating budgets should be studied. A tax structure covering the costs of growth and equitably distributing the costs may be the subject of a new operating objective.

• If growth forecasts are still comparable to those of 1976, a comprehensive transportation study should be undertaken to provide for the early 1980's population. It should include recommendations for revenues and implementation.

• A decision on issuing permits for a fifth trend plant to begin construction will be necessary. It should be based on the local community's ability to accommodate new employees.

• Expansion of Sweetwater Counselling Services program "Counseling to Aid Woman in Distress" may require additional funding.

• Lobbying at the state level has succeeded in establishment of mobile home standards and an increase in assessment of mobile homes.
<table>
<thead>
<tr>
<th></th>
<th>CONSERVATIVE ESTIMATE</th>
<th>MODERATE ESTIMATE</th>
<th>HIGH ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year: 1983</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plants: under construction operating</td>
<td>one new trona</td>
<td>Same as conservative plus</td>
<td>Same as moderate plus intensive coal development and oil shale</td>
</tr>
<tr>
<td></td>
<td>five trons,</td>
<td>coal gasification or liquefaction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>two coal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment: construction:</td>
<td>1,000</td>
<td>4,000</td>
<td>5,000</td>
</tr>
<tr>
<td>(Total)</td>
<td>7,300</td>
<td>8,900</td>
<td>10,700</td>
</tr>
<tr>
<td>plant:</td>
<td>11,760</td>
<td>16,450</td>
<td>18,000</td>
</tr>
<tr>
<td>local service:</td>
<td>15,395</td>
<td>21,826</td>
<td>25,380</td>
</tr>
<tr>
<td>Population: total</td>
<td>53,281</td>
<td>76,870</td>
<td>88,875</td>
</tr>
<tr>
<td>School children:</td>
<td>15,281</td>
<td>21,826</td>
<td>25,380</td>
</tr>
<tr>
<td>Total school rooms required:</td>
<td>611</td>
<td>873</td>
<td>1,015</td>
</tr>
<tr>
<td>Incremental school rooms required:</td>
<td>61</td>
<td>262</td>
<td>142</td>
</tr>
<tr>
<td>Total permanent housing units required:</td>
<td>9,935</td>
<td>15,876</td>
<td></td>
</tr>
<tr>
<td>Incremental permanent housing units required:</td>
<td>3,789</td>
<td>8,566</td>
<td>9,998</td>
</tr>
<tr>
<td>Incremental mobile home pads required:</td>
<td>323</td>
<td>1,316</td>
<td>1,124</td>
</tr>
<tr>
<td>Estimated revenues to county from ad valor tax on trona, coal, power production - ?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated revenues from property tax - ? (residential, commercial, industrial)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*See note, page 38, for assumptions.

**Assumes state has increased bonding limit by 1975 legislative recommendations, i.e., passage of constitutional amendment doubling debt limit of cities, counties, and school districts.
Year 1979

- Review the functioning of the Sweetwater County Priorities Board (as in 1976).

- Green River and Rock Springs city governments should be self-sufficient in planning and administrative staff.

- The development of the recreation complexes should be reviewed. If they are not meeting community objectives, public facilities and programs should be expanded.

- Basic to local service employment multipliers should be reviewed to see if they have met the 1975 DOO (a return approximately to 1971 levels).

- The transportation plan authorized in 1976 should be in the early stages of implementation.

- As coal and iron mining and processing grow to further dominate the Sweetwater County economy, active efforts to diversify the economy should be considered. These would probably involve trade-off decisions between seeking diversification and thus generating more growth or maintaining a specialized mining economy dependent on changes in technology or markets. A successful diversification program would probably require six to ten years, so advance planning is necessary.

- Priorities Board (in conjunction with inter-county planning council) has established guidelines for industrial entry or expansion in the area, including provision of housing for some proportion of new employees brought to area.

- survey (completed in 1978) results indicating achievement of DOO 9 should provide guidance to further efforts at enriched quality of life.

- Redetermine the hierarchy of goals and objectives.