

MAINE STATE LEGISLATURE

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Small Business Management
Research Reports

PLANNING STUDY
for the
ECONOMIC GROWTH
of the
STATE OF MAINE

Prepared by ARMOUR RESEARCH FOUNDATION for
THE STATE OF MAINE, DEPARTMENT OF ECONOMIC DEVELOPMENT
under a grant from the
Small Business Administration, Washington 25, D. C.

PLANNING STUDY FOR THE
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awarded to

THE STATE OF MAINE, DEPARTMENT OF ECONOMIC DEVELOPMENT

Project Director

SULO J. TANI

Director, Research and Planning Division

Department of Economic Development

State House

Augusta, Maine

February 1961

FOREWORD

This Small Business study, "Planning Study for the Economic Growth of the State of Maine," has been conducted and prepared by Armour Research Foundation under a Small Business Administration grant awarded to The State of Maine, Department of Economic Development, Project Director, Sulo J. Tani.

The research was financed by a grant made by the Small Business Administration, United States Government, under the authority of Public Law 699 (85th Congress).

Only a limited number of copies of the full report have been printed. It is available for reference in any of the Small Business Administration offices throughout the United States or at many reference libraries.

This summary publication is available in reasonable quantities. It may be secured from SBA field offices or from the Small Business Administration, Washington 25, D. C.

The Small Business Administration assumes no responsibility for the accuracy of the data contained herein, nor does it necessarily endorse any opinions, conclusions or recommendations which may be a part of this report.

JOHN E. HORNE

Administrator

TABLE OF CONTENTS

Chapter	Page No.
ONE INTRODUCTION	5
TWO A LOOK AT MAINE—AN APPRAISAL	7
THREE MAINE'S POTENTIAL FOR ECONOMIC GROWTH	15
Evaluation of Maine's Present Industry	19
Pulp and Paper	19
Lumber and Woodworking	24
Food Products (Agriculture and Fisheries)	29
Shoes and Leather	40
Textiles	43
FOUR NEW ECONOMIC ACTIVITIES WITH GROWTH	
POTENTIAL FOR MAINE	50
Light Metal Fabrication	51
Recreation Equipment	53
Specialty Printing	55
Confectionery Products	57
Trailer Production	59
Electronics	61
Pharmaceuticals	62
Products from the Sea	64
Recreation and Tourism	68
FIVE CONCLUSIONS AND RECOMMENDATIONS	70
The State Program	77
The Community Program	88

Chapter One

INTRODUCTION

This study was instituted by Maine's Department of Economic Development to serve as an impartial analysis of the State's growth potential. The Armour Research Foundation was requested to conduct this analysis and to design a program for attaining this economic potential. This program, which may be called a plan of action, is to serve as a base and guide for the future activities of the Department.

The analysis was quite thorough. Staff members of the Armour Research Foundation personally interviewed many persons within the State to gain firsthand knowledge of their present activities and future plans. In addition to meetings with city and community officials, the staff surveyed representatives of various industrial and commercial activities. The results of this survey were supplemented with statistical analysis to gain further appreciation of the trends within the State and in the Northeast. Conferences were also held with staff specialists at the Armour Research Foundation, and with various groups in the Federal Government and in diverse private enterprises who are active in state and community development functions. In this manner, all likely sources of pertinent information were reviewed to formulate a program tailored to the requirements of the State of Maine.

This report summarizes the results of the survey of the State, its communities and the major industries, the analysis of potential growth activities for the State, and the program—plan of action—for the State, its communities, and the Department of Economic Development.

A portion of the over-all study on Maine's economic development and industrial planning was conducted for the State itself; this material is contained in a separate, but related, report which has been prepared for Maine's Department of Economic Development.



Chapter Two

A LOOK AT MAINE - AN APPRAISAL

The State of Maine has potential that can be developed. The State possesses many favorable features. A realistic appraisal reveals that these various features can add measurably to growth in the future, and, in some cases, can effect new economic activity. But to attain the maximum potential, some of the present shortcomings, those which can be humanly controlled, must be corrected and changed into assets.

This chapter covers the results of the survey and analysis of the features in the State which would tend to influence economic activity in the future. The various assets the State has to offer are reviewed together with the liabilities. Again, it is emphasized that in some cases present liabilities can be overcome and thereby changed into features which could enhance economic development in the State.

Maine Has Important Assets That Can Form the Base for Economic Development:

Labor Supply and Costs

Raw Materials — Forests, Mineral Resources and the Sea

Climate and Living Conditions

Water Supply

Community Attitude

Taxes

The assets Maine presently has can lend a firm base to the economic development of the State. Each of these assets is briefly reviewed below:

Labor Supply and Costs — Maine's working force is one of its major assets. Workers in the State are generally of high quality in terms of productivity and adaptability to new work. Other points in favor of the Maine working force include its general availability, willingness to commute, an excellent history of labor-management relations, and the moderate wage levels generally prevalent throughout the State as compared to other states in the Northeast. The major drawback of the Maine working force is its lack of skills. It is par-



ticularly unfortunate that Maine's young workers do not have an extensive opportunity to acquire these skills in either high school vocational programs or on-the-job experience. This is felt to be an influencing factor both in the high rate of high school drop-outs in Maine and in the general exodus of young people from the State.

Raw Materials — Forests, Mineral Resources and the Sea — That forests are considered a net asset for Maine is largely due to the present contribution forestry makes to the State's economy, and to the opportunity that exists for a greater return through more intensive forestation practices. A limitation is the limited degree of renewal of pine and birch presently practiced in the State.

The State's mineral resource is almost wholly a potential rather than a present asset. Present mineral production provides less than 1% of the State's manufactured product, and only 0.7% of the total mineral production of the United States. There are suspected reserves of certain minerals in the State which could benefit future industrial expansion. However, Maine has only recently stimulated exploration programs to locate and identify these reserves. At present, there is no satisfactory picture of what mineral wealth the State possesses.

Sealife might well be considered Maine's third source of raw material, since it is analagous to the other two in that it is readily available for economic utilization, and requires only harvesting, so to speak. Maine's fisheries industry, especially lobster, makes the sea an important source of raw material, and one that can expand in the future.

Climate and Living Conditions — The climate of a good portion of the State is certainly an asset for Maine. The U. S. weather bureau has acknowledged this by referring to it as being "most ideal".

Unfortunately, the climate of Maine is generally misrepresented outside the State, particularly regarding the rigors of Maine winters. This has hurt the State. And as strange as it may seem, Mainers themselves are guilty of spreading these misconceptions about their winters. In some cases they actually believe their winters are extraordinary — in other cases they may be boasting. Whatever the reason, the impression that many Mainers themselves have, and pass on to outsiders, is detrimental to the development of their State.

Living conditions within the State are distinctly favorable. Cultural activities are weak, but Boston is only about two hours away from Southwestern Maine by auto or rail. The secondary educational system in Maine appears to be weaker than the national norm, but it is understood to be improving, largely due to new legislation. Housing is plentiful, and the State's recreational facilities superb.

Water Supply — One of Maine's most important assets is its abundant water reserves. New England as a whole is well supplied with water, and Maine is particularly well endowed with it. Four major river basins lie wholly within the State, and portions of three other basins are shared with neighboring areas. It is reported that the water supply in the region is more than adequate for the next fifty years.

Maine's most serious water problem is pollution. One pollution expert feels that despite the superior reserves of water which the State has, the effect of significant water pollution leaves Maine no better off for water than her New England neighbors. Stronger legislation to control pollution might well be considered by the State.

Community Attitude — Generally speaking, the attitude of Maine's communities is favorable to new business. In the course of the sur-



vey work, many examples of community action were found which indicated that the populace was receptive to and desired new economic programs and developments. It is important for them to communicate this favorable attitude to industrial prospects by contact and promotional activities.

Taxes — Maine's taxes and tax philosophy are favorable to industry, particularly in comparison with other New England states. As far as can be learned, it is unlikely that the State's favorable tax structure will change appreciably in the imminent future, and it should, therefore, continue to be an asset, especially in direct comparison with nearby states.

At the local level, property taxes throughout the State are definitely competitive with tax structures in other states' local communities. The major tax problem at the community level is inconsistency in tax assessment procedures. Fair tax assessment can be an important influence in plant location; communities in which a manufacturer feels he is "picking up the tab" for the whole town, do not attract industry.

The Following Limitations Could Affect Maine's Future Economic Development:

Location

Building and Sites

Transportation

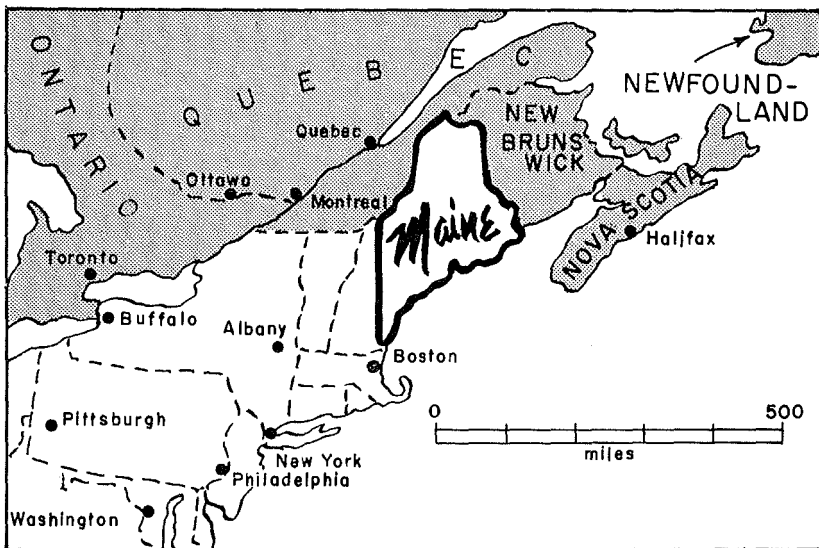
Power and Fuel

Legislative Programs and Attitude of Government

Finance

The deficiencies that Maine presently experiences include factors that are quite important to economic development. In many cases, these limitations can be corrected or, at least, their effect can be minimized. Each of the limitations is briefly covered in the following discussion:

Location — Maine's location in relation to national markets is one of the most apparent limitations. The huge development of the Mid-Western and Southern manufacturing areas has hurt the Northeast to some extent. More important, this growth has resulted in severe competition for the manufacturing activities in the Northeast which serve national markets.



Nearby primary markets where Maine products should not suffer a competitive disadvantage are in New England, New York, part of

the Middle Atlantic States, and Eastern Canada. With the exception of Canada, these primary market areas are expected to show a moderate growth trend in the future. Canada is growing rapidly and may possibly exceed the growth rate of the Northeastern region of the United States. Maine is particularly well situated to serve Eastern Canada, should this area enjoy substantial growth.

Buildings and Sites — The State can offer available manufacturing space, but this is very largely in the form of old, multi-story buildings which are not readily adapted to general purpose manufacturing. Local Maine communities have concentrated on filling up empty buildings; this, while justified in the short term, is not realistic to contemporary manufacturing needs. Some Maine communities are belatedly attempting to meet these needs through construction of speculative buildings.

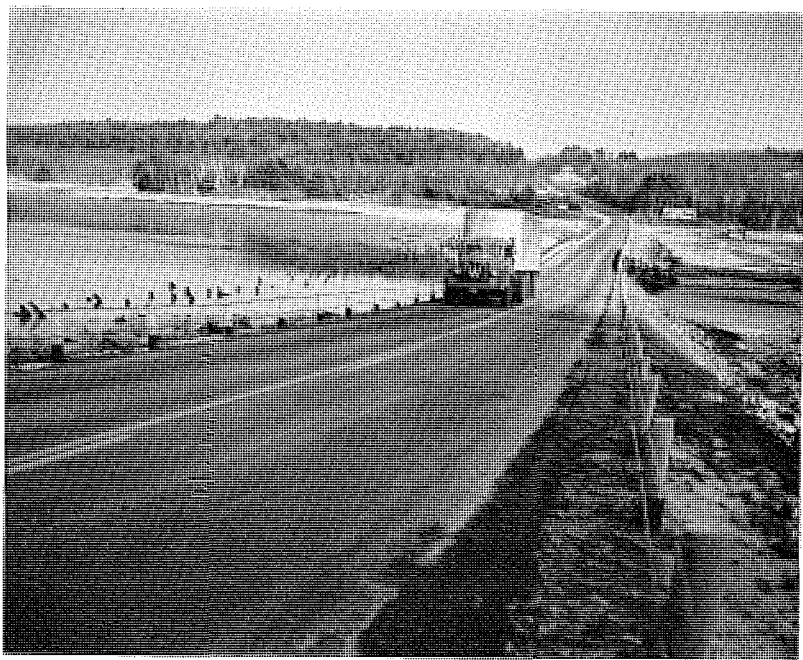
Warehouse space is generally considered sufficient throughout the State for current needs. Some cities are deficient in storage capacity and in the loading and unloading facilities required for expedient handling of materials.

Maine has ample raw building sites available for industry, but in this the State does not differ from other neighboring states. The availability of improved land in the form of industrial districts or industrial parks is limited throughout the State.

Transportation — On the basis of general findings, it appears that the State's transportation networks limit industrial development. The picture is mixed. Maine's highway network is quite good, particularly in view of the State's relatively small population. It is, however, strongest in the Southwestern section of the State and is generally not much improved North and East of Augusta.

Rail and air passenger service to the State from nearby economic centers is weak. The need for frequent travel between major market centers and plants located in the State makes this a distinct disadvantage.

Maine seaports and water transportations, while presently limited in usage, might be considered a potential asset if more interest could be generated in this means of transportation. This could be especially important if activity in foreign products, import of raw materials and some finished products, would be generated.



Power and Fuel — Cost of power and fuel throughout the entire New England region is higher than the average for the country. Although power costs in Maine are lower than those in other New England states and generally competitive with other Northeastern states, Maine's power rates must be rated as a limitation, especially where national markets are served. Within a strictly New England context, however, power rates in Maine are slightly favorable.

No such mitigating factor can be claimed for the cost of fuel in the State. All of New England's fuel, both coal and oil, must be imported into the region. Because residual oil is shipped by water from the Caribbean or South America, its landed cost at Maine ports is no higher than at other New England ports. Coal, which is supplied from middle atlantic and southern sources, is generally higher in Maine than in more accessible New England areas.

Legislative Programs and Attitude of Government — Traditionally, Maine's legislative programs have been friendly to industry. The State's tax policies are favorable to industrial development; however, the State is apparently reluctant to provide for industry's needs of the future. The difficulty of the University of Maine in se-

curing funds for growth and development, and the lack of adequate vocational training facilities throughout the State are major evidences of this reluctance.

In the long range, a scarcity of trained personnel and facilities hampers industrial growth. Unless this situation is corrected, Maine will suffer in the future.

Finance — Although Maine has developed new means by which industry can secure financial assistance, the older and traditional private financial institutions in the State are still relatively conservative in comparison to those in other parts of the Northeast. For this reason venture capital is difficult to obtain. Although venture capital is tight, public and some newer private financial organizations are having a liberalizing effect on financial thinking in Maine, as is an influx of younger people in banking circles in the larger communities. At present, the decided conservative cast to Maine banking is a limitation for the State's industrial expansion.

This chapter has presented an evaluation of some of the more important resources, facilities and capabilities of the State that have a bearing on future economic development in Maine.

Chapter Three

MAINE'S POTENTIAL FOR ECONOMIC GROWTH

There is every evidence that during the next decade America will experience considerable growth in population and income; New England will share in this growth, and will surpass certain other regions in population increase.

Since the anticipated expansion of New England will tend to be greater in the southern part than in the northern part of the region, a challenge is thrown open to Maine. The State must strive to increase its relative share of this growth, to minimize its loss of capable young people, and to enhance the standard of living of all its population.

This chapter first presents a broad picture of the New England Economy in 1970. Next, it covers Maine's potential for economic growth first appraising its present five major industries. The succeeding chapter reviews some new economic possibilities for future exploitation.

By 1970, New England's Population Is Expected To Increase by 10% . . . Its Personal Income by 28%

A population increase of slightly over one million is expected for New England in the sixties; this will be the largest gain in any decade of the region's history. New England is expected to add 17 persons per square mile in the next decade, as against 11 for the nation as a whole. The density of population by 1970, therefore, will likely be 180 persons per square mile in New England, as compared to 72 for the nation as a whole.

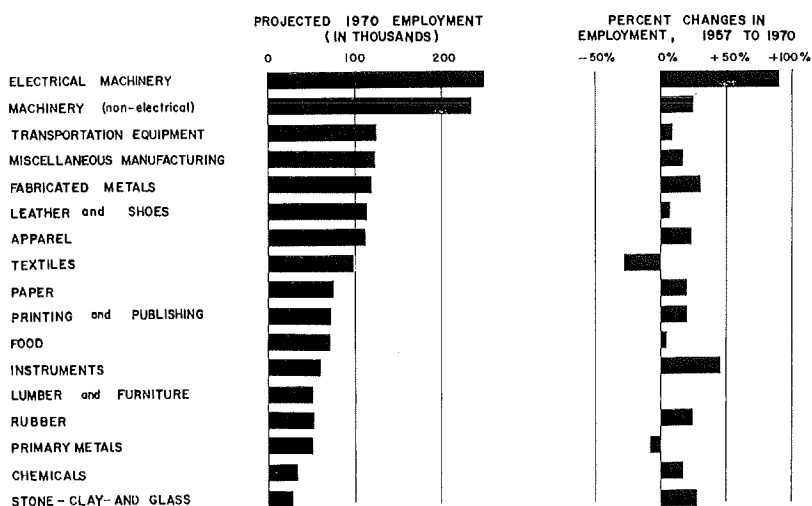
Personal income will be increasing. In terms of real income, which discounts the effect of inflation, total personal income in New England is expected to increase by \$7 billion, 21% over the present level. Allowing for the increase in population, income per person is expected to rise by \$495 from 1957 to 1970. This increase is a gain of 21% for the region, as compared to a national anticipated rise of about 23%.

Discretionary income will rise significantly; it will increase by a percentage higher than the 21% rise in income per person. "Discretionary" income is money available after satisfying the basic

requirements for clothing, food, and housing. It generally is spent for luxury or semi-luxury items such as additional appliances, recreation equipment, vacations, a second car, and so forth. This creates a host of new "recreation oriented" industry possibilities.

The effect of this over-all growth will be to create expansion opportunities in many industries, in education, and in recreation. The chart below shows the possible composition of manufacturing

NEW ENGLAND MANUFACTURING EMPLOYMENT



SOURCE: FEDERAL RESERVE BANK OF BOSTON

employment in various industries in 1970, with comparison to that in 1957.

But such growth will not come by itself. It must be nurtured; otherwise, industrial competition from other regions and from foreign countries will take its toll, and may cause migration from New England.

To Attain the Estimated Potential That Exists for New England, More Employment Opportunities Must Be Created and Manufacturing Must Become More Efficient

The Federal Reserve Bank of Boston has estimated that over 421,000 new jobs must be provided in New England to accommodate the expected population rise. Manufacturing activities will be the

largest employer in this period and they, therefore, will be required to provide most of this needed increase.

New England manufacturers will have to compete more and more in national markets — at least in the market east of the Mississippi. This will be challenging, since traditionally New England has serviced the area adjacent to it, and since the cost of transporting goods from New England to these other markets presents a problem.

Efficiency must be increased if manufacturers in New England are to compete successfully with other regions and with foreign producers. Capital investment in new facilities and new machinery will be required. New England manufacturers have used far less capital per worker, and have invested far less per worker in capital facilities, than have their counterparts in the rest of the nation. In the period 1954-56, New England's investment rate was 40% slower than the national average. To gain increased efficiency, New England manufacturers must adopt new production equipment and techniques.

Because of Its Location and the Scarcity of Natural Resources, New England Must Concentrate on Developing Its Best Asset: Manpower

In one way, New England's lack of extensive natural resources is cause for mourning; in another way it might become a blessing. It forces a condition upon the region that can help to make it a very desirable area for its population in the future. This condition is that the greatest asset that the region possesses — manpower — be made more valuable. The way to do this is by increasing the skills of the work force, not only in the trades, but more important, in the professional areas of research and development.

For a moment, envision the structure of a region highly oriented in skilled activities. The populace would be better educated, better paid, than that of most other regions. The rise in discretionary income would be large, since the higher wage and salary rates would permit considerably more expenditures on "luxury" items and activities. More families would have better housing, more appliances, newer cars; they would enjoy the added leisure and pleasures that enhance living.

Perhaps it is fortunate to be forced in such a position by competitive pressures. For either the region will flourish or it will de-

generate. Yankee determination can make New England a growing, thriving area.

Maine Can Become a More Integral Part of the New England Complex and Should Plan to Increase Its Growth Potential

Forecasts permit some insight of what will likely result from a given set of conditions. In New England for example, it is seen that Maine will grow — in some cases more than some of its neighbors, in other cases less.

POPULATION OF NEW ENGLAND

(In Thousands)

	1960 ¹	1970 ²
New England	10,509	11,380
Maine	969	1,018
New Hampshire	607	655
Vermont	390	404
Massachusetts	5,149	5,595
Rhode Island	859	943
Connecticut	2,535	2,766

SOURCE: ¹ 1960 Census of Population

² Federal Reserve Bank of Boston

This chart points out the relatively low population increase in Maine as compared to the other states in New England. Actually, these figures reflect the anticipated migration of New Englanders from the northern to the southern part of the region. The Federal Reserve Report¹ mentions that, "Most New Englanders will seek to live in Massachusetts, Rhode Island, and Connecticut" and goes on to say that, "... over three-quarters of the population growth will occur in these southern states." The reason for this shift is attributed to, "... the pull of job opportunities primarily setting the pace of the differing state growth rates."

Maine must decide whether it will accept this situation or whether it will attempt to change it. Since the forecasts are predicated on a given set of conditions, changing the conditions ... in this case, increasing Maine's aggressiveness in economic development ... can change the results. It has been done before ... and Maine can do it too.

¹ Federal Reserve Bank of Boston — Annual Report, 1959

Maine can play a bigger role in New England's economy, if it plans for and aggressively promotes economic expansion on all fronts. This means actively cultivating its present industry, introducing new economic activities, and effectively soliciting new industry from outside the State.

EVALUATION OF MAINE'S PRESENT INDUSTRY

In looking at Maine's potential for the future, one of the most important considerations is the expectations of its present industry . . . for these will have the greatest impact on the State in the next few years and can be instrumental in directing some of its long-term trends. Through the encouragement of growth in present industries, an effective base can also be laid for attracting other economic activities in the future.

Accordingly, the five major industries in the State were surveyed to learn of their present operating activity within the State, and more important, to determine their future plans. The survey results are presented in the following sequence: Pulp and Paper, Lumber and Woodworking, Food Products, Agriculture and Fisheries, Leather Products, and Textiles.

PULP AND PAPER

The Pulp and Paper Industry in Maine Is Strong and Is Expected to Increase Its Output Moderately Over the Next Ten Years

The pulp and paper industry's production in Maine has comprised the largest portion of the State's manufactured product. In recent years, it has been increasing; contributing 21.9% of the State's total manufactured product in 1952, it grew to 27.7% in 1958. A good portion of the credit for this increase is due to the aggressiveness of the industry's management, both in meeting competition with increased efficiency and with product diversification. Future expansion of significant proportions, however, is dependent on maintaining an increase in the supply of pulpwood and on expanding the specific types of products produced in the State. The U. S. Forest Service report on the timber resources of Maine has indicated that the growth versus drain, affords opportunity for expansion in paper production. A need exists, however, to achieve greater utilization of poorer quality hardwoods which would help to improve the stands of softwood.



While the Industry is Growing Nationally, It has Remained Fairly Stable in the Northeast

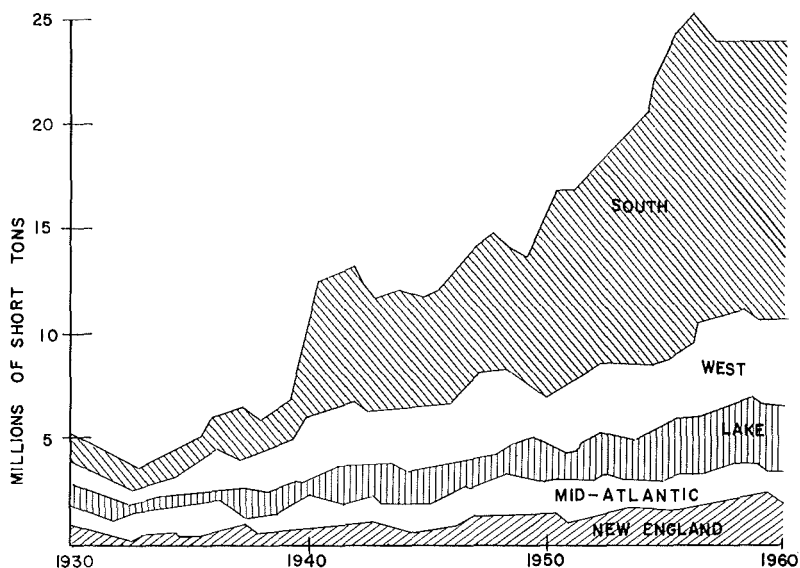
Looking first at the pulpwood part of the industry, we find that a significant growth has been experienced, as shown in the following chart. Much of this expansion, however, has been achieved by increased production in the South, and more recently in the West. New England pulp production has remained virtually constant over the last thirty years.

In paper and paperboard, total United States new supply also has shown a significant growth, especially in the last two decades. While imports have increased, by far the largest portion of the new supply has resulted from domestic production as shown in the chart below. Imports may pose a greater competitive threat in the future, especially in imported newsprint (imported duty free) along the coastal areas.

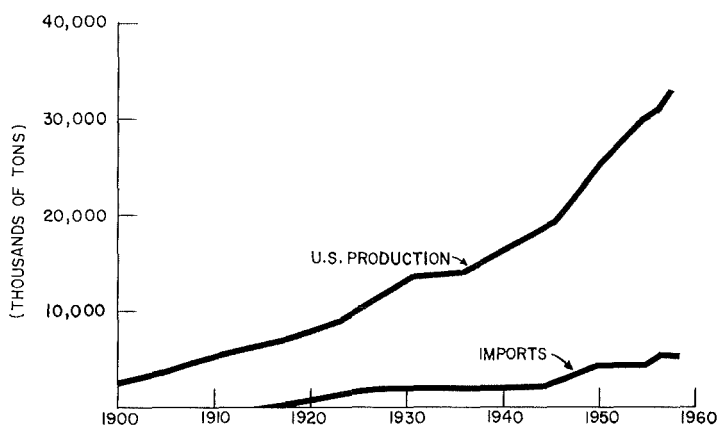
Maine's part in the current Northeastern production of paper and paperboard as compared to other nearby states is favorable; this is due to the State's large inventory of trees and forest land.

Maine accounts for about 20% of the region's total production. The State's production is mainly in paper; only a negligible amount of paperboard is produced.

WOOD PULP PRODUCTION



UNITED STATES SUPPLY of PAPER and PAPERBOARD



Operating Conditions in the State are Favorable: Management is Aggressive

The paper companies have generally expressed satisfaction with operating conditions in the State. Labor is productive, taxes are realistic, and transportation is satisfactory.

Management for the most part, is progressive and aggressive. Its future plans are to maintain operations through technological developments and, wherever possible, through product diversification.

The Industry Presently Faces a Restriction on the Growth that May be Achieved

Management in the industry believe that two factors inhibit extensive immediate growth: first, the limitation of the pulpwood supply, second competition. In discussions with some of the **larger producers** of pulp and paper in the State, it was generally **estimated** that, on a sustained yield basis, the supply of pulpwood would only reasonably permit approximately a 10% increase in industry capacity. This relates only to the volume of basic pulp production and not to the industry's volume where a diversification in the end use might be attained. (State foresters believe that the data developed by the U. S. Forest Service, based on a new study on Maine's forest reserves, indicates that a larger potential exists than previously has been estimated).

Competition stems from two primary sources, the South and foreign countries. Newsprint is particularly vulnerable since Southern production has increased substantially. While somewhat inferior to the newsprint made in the North, it is satisfactorily being used. Foreign competition, mainly from the Scandinavian countries, is also likely to increase. New production facilities there permit the production of quality paper at low cost. Then too, the lack of import duty on newsprint permits the lower cost Scandinavian papers to be competitive especially along coastal areas.

Expansion Opportunities Center Around Specialty Papers, Other Paper Products, and Lightweight Board

Product diversification into specialty papers is perhaps one of the foremost means for the industry to expand its volume in the

State. The paper industry is firm in its conviction that paper produced from Northern pulpwood is superior to the South's product. This, then, appears to offer Maine's producers a distinct advantage and one they might well use to increase volume.

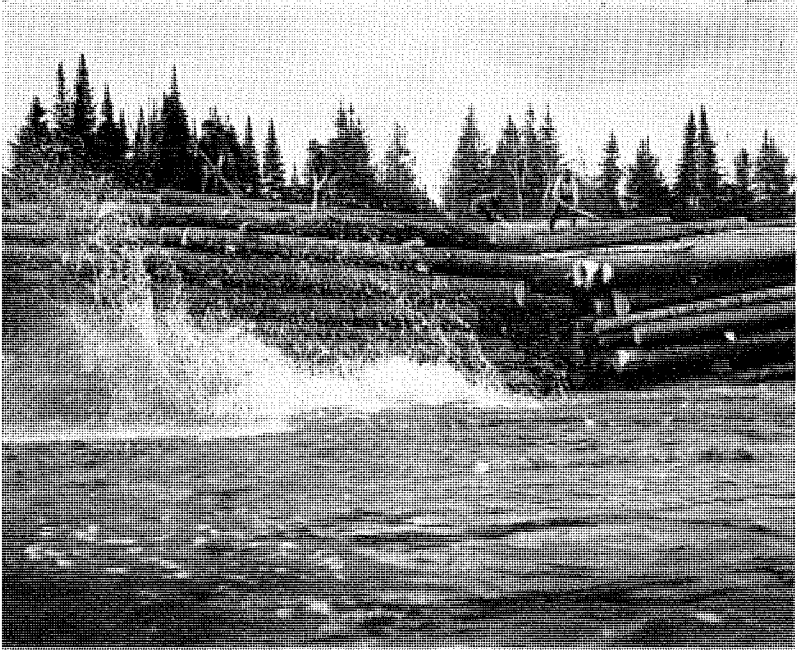
Other paper type products could also lend themselves to production in Maine. Some examples are clothing, water coolers, disposable gloves, and so forth. A lightweight board of honeycomb construction might also prove feasible. A study on the feasibility of producing particle board is currently being conducted by the State's Department of Economic Development and the State Forest Service as an SBA research grant project.

The Future Program of the Industry Should Center About Product Research and Forest Management

One of the foremost needs of the industry is to develop new pulp and paper products; more research along these lines is warranted. One suggestion for product development is the lightweight construction board mentioned above. Other products such as clothing could also be developed by a suitable research center which could be sponsored by either the State or jointly by the forestry industries in Maine.

Forestry management should be intensified in two areas: first, species important for lumber and woodworking, birch and pine, should be replenished; second, the production of present forest lands should be intensified. As a first step to this program, it is suggested that an economic study on forestry practices be considered; this study can be conducted with the cooperation of the regional office of the U. S. Forest Service and can likely follow the pattern of the study currently being completed by the Lake States regional office of the U. S. Forest Service. Such a study should form the basis for the most profitable approach to tree growing and harvesting in the State. It would be beneficial to have the owners of large forest tracts in the State participate in such a program.

To encourage the growth of trees, it may be worthwhile to review the tax structure on forest lands. It is suggested that a study be made on this subject, considering in particular, inducements that would enhance growing trees to their economic maturity. The program developed by New Hampshire, wherein taxes are assessed on timber harvested, seems worth looking into.



LUMBER AND WOODWORKING

The Lumber and Woodworking Industries Offer Significant Potential for Development in Maine

Maine's lumber and woodworking industries show good promise for future development. In lumber, an opportunity exists to increase considerably the amount of work performed on lumber items before they are shipped outside the State, thus increasing the value of product shipped. Woodworking offers an exceedingly good opportunity to producers who utilize modern equipment and practice aggressive management techniques to develop larger and more lucrative markets. The survey team found excellent examples of progressive companies who are profitably engaged in both segments of this industry in Maine; from all indications and analyses, this same opportunity exists for others also.

Lumber

In the Lumber Segment of the Industry in Maine, A Trend May Develop Toward Larger Operations

At the present time, the lumber industry in Maine is faced with

many problems and with many small producers. In numerous cases, lack of suitable equipment by the small producers has resulted in a lower grade product which has a limited market. The industry, in being competitive, creates a profit squeeze on these smaller producers and restricts the available funds for investment in new facilities. Due to such capital restrictions, the operations also tend to be marginal, operating only in favorable periods.

The industry in Maine has also characteristically been restrictive in the degree of work performed on lumber: the small operators generally sell only rough lumber stock, the larger operators in some cases go a step further in dressing the material and in producing paneling. However, extensive milling operations, moulding productions, and custom cutting are not done. This limited amount of work has tended again to restrict the value of product shipped by these producers and thus restrict their revenue.

Larger operators for the most part, are in a relatively favorable position. They have better equipment to produce a higher grade product. They are more sales conscious and devote more effort to marketing. Their capital position gives them more latitude in production and forward planning programs. They are looking at new products and markets.

It appears likely, therefore, that the larger operators will continue to develop a trend toward expansion within the State while the smaller marginal operator will be forced to restrict operations.

The Lumber Industry Generally is Encountering Problems in the Availability of Timber, in Management Capability, and in Cost Control

Of the major problems which beset the industry, the one with the longest range consequence is the availability of suitable timber. Where stands of large trees once dominated the State, today only small trees are found, a characteristic of much of the nation's forests. This smaller stock, in birch and white pine particularly, results in a lower grade product, one characterized by many more defects than would result from more mature and larger timber.

Another problem the industry faces lies in the area of management capability. Especially in the smaller operations, as well

as in some of the medium size ones, the management personnel require more technical and marketing know-how. In the technical areas they are not familiar with new production techniques in manufacturing lumber and in millwork operations; in the management area itself they require more knowledge of marketing and production control to handle the competitive situation profitably. The smaller operations in particular are hampered by a lack of sufficient capital and productive volume to support product development and a sales force which would serve to expand their market volume.

A related problem area, cost control, is identified separately since it is one item typically lacking in the industry's operations in Maine. Producers do not keep cost records and thus are not aware of the costs of various items they produce. Only at the end of a fiscal period do they find whether operations have been profitable.

To Utilize the Opportunity That Exists for Growth, the Following Should be Considered by the Lumber Industry:

- Improve Quality of Production**
- More Processing of Products**
- Increase Cost Control**
- Local Organization of Producers**

To enhance long term profitability, the product will have to be of better quality. This will require newer equipment and the utilization of new techniques such as electronic glueing, splicing, kiln drying, etc. By increasing quality, Maine's producers will be in a better negotiating position in marketing their lumber.

It would be of distinct advantage to increase the amount of work done on lumber items before they are shipped out.¹ Thus custom work in milling, cutting, mouldings, etc. would greatly increase the return from the same basic product and tend also to enhance profits.

Management could help itself measurably by becoming more knowledgeable in the techniques of marketing, production control, cost control, finance, and so on. Without such a background, it is extremely difficult to meet the competition's ability, much less to grow and expand operations.

¹ A study financed by SBA, sponsored by DED, and conducted by the School of Forestry, University of Maine, will assess the potentials in Maine lumber in the building trades; this will probably be completed in late 1961.

It is also suggested that lumber producers be encouraged to form a local organization. This organization could serve the purpose of:

- (1) disseminating production, management and market information, and
- (2) provide for research activities.

Most producers in the State are too small to do these functions independently; jointly, they could support such activity.

Woodworking

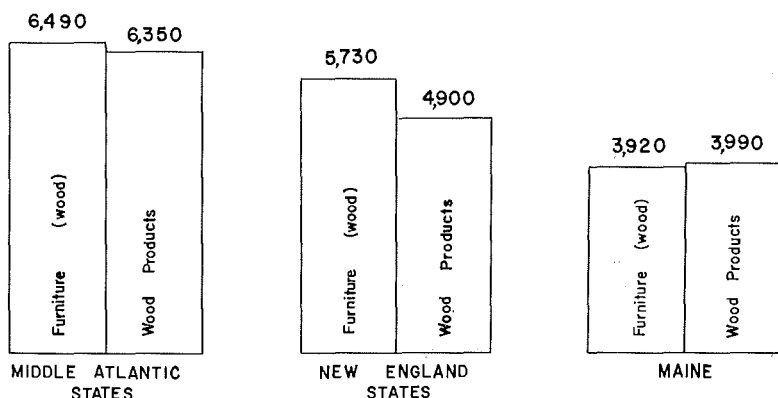
While Firms in Maine's Woodworking Industry are Generally Old and Small, Some Progressive Concerns Exist

Maine holds a favorable position in the Northeast's woodworking industry. In its major product line, which falls under the Standard Industrial Classification category of Miscellaneous Wood Products, Maine ranks third in production in the Northeast. In wood furniture, however, Maine is very low in production.

The industry is characterized by many small producers who generally specialize in a few products. Their buildings and equipment are generally old, though well maintained. Much of their machinery is of a specialized type. Competition is keen in many of the lines now produced.

Typically, low value products which result in low returns per production worker are manufactured. Some examples of these are dowels, spools, toothpicks, throat depressors, etc. The chart below shows the return per production worker in woodworking, broken down into its two component categories: furniture and wood products.

AVERAGE RETURN PER PRODUCTION WORKER (IN DOLLARS)



The average return per production worker in Maine is seen to be considerably below the average for both the New England and the Middle Atlantic states. This chart also points out return which may be secured from furniture productions, a higher value type of product. Thus, it would behoove the industry in Maine to consider higher value products in furniture as well as in other items in order to increase its volume and related profit margin per worker.

The Woodworking Industry in Maine has Three Main Problems Restricting its Growth:

Limited Marketing Activity

Lack of Cost Control

Little Self Motivation

That the woodworking industry can be profitable in Maine is exemplified by the fact that some producers in the State have shipped as far as the West Coast. These have developed a well designed product, reasonably priced, and well marketed.

Too many producers in the State feel they are hampered in their sales activity, as far as increasing coverage and volume, since they deal through sales agents, a practice they do not relish but nevertheless are forced into because of cost. Some of the experiences of the more successful operations, as previously mentioned, however, indicate that selective sales representation can be effective where a direct sales force is prohibitive.

Cost control in the woodworking industry is inadequate — as it is in the lumber industry. About the same situation exists; little or no cost records are maintained, and only the fiscal reports define the profitability of operations. This is one reason why producers do not become more involved in custom work; they just are not aware of its profitability.

The most important problem facing the industry is a difficult one to deal with: its lack of motivation. Little interest in expanding operations was found in producers in this industry. In some cases when expansion would be most feasible and profitable, the owners were satisfied with their operations as they presently exist and had no desire to increase them. Some exceptions do exist. A few concerns were surveyed where expansion and growth

were being planned; the management of these firms appeared aggressive and resourceful. In this industry, however, it was found that such persons were in the vast minority.

Opportunity for Expansion is Possible Through:

Upgrading Products

Improved Market Techniques

Increased Management Control

Profitable growth can be achieved in the woodworking industry in Maine. To attain it, the industry should look to the production of higher value items such as block flooring, skis, inlaid veneers, carvings, boat components, and so on. Furniture presents a distinct opportunity for a well designed medium priced line. In the development of such products, professional designers should be employed, and quality must be achieved.

Marketing should be given more consideration. Wherever possible, direct salesmen should be employed. If this is not feasible, the owner/operator should consider part-time selling as one of his main functions. Telephone calls and direct mail can admirably supplement a few personal calls made by him each year.

Management control needs attention. Cost control is one problem which is jeopardizing expansion in many companies. Another management area for improvement is in profit planning and in the use of capital — especially as it relates to the procurement of new facilities. It is likely that bankers could help in this latter area.

It would certainly assist the industry if seminars were held on management control and profit planning. In addition, a program for this industry should include an introduction into product diversification. It might also be worth considering the production of more completely finished product lines rather than ship only components out of the State as one part in the diversification program.

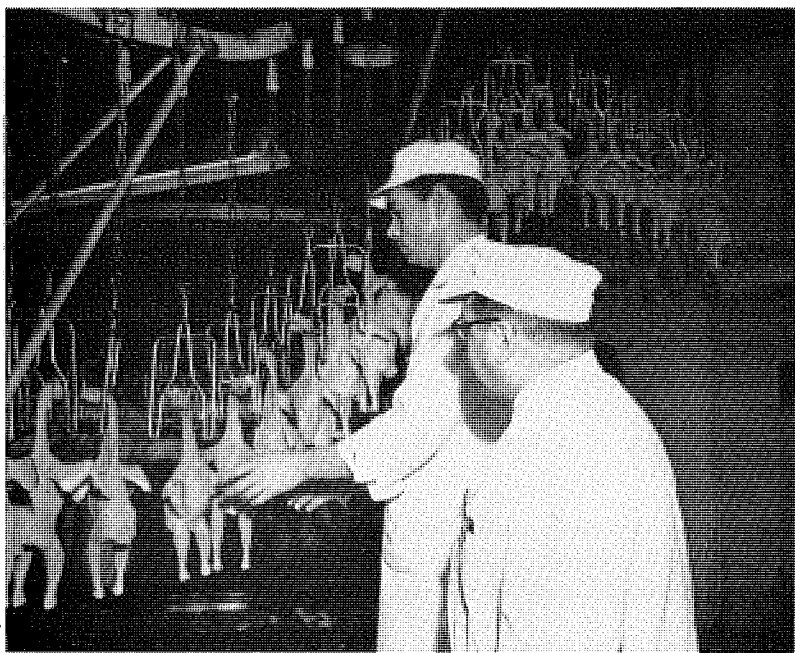
FOOD PRODUCTS — Agriculture and Fisheries

Food products in the State can be divided into those products which are agriculturally based and those which are products of the sea. The food products which are of major importance in Maine are

poultry products (broilers and eggs), potatoes, dairy products and lobsters. Of secondary importance at the present time are fruit and vegetable crops and other sea products.

Broiler Production is Maine's Most Dynamic Food Products Industry — It Can Expand if Costs Can Be Controlled

The last decade has witnessed a major growth of the broiler industry in Maine. Three factors were instrumental in this growth: increased market demand, lower costs to consumers due to more efficient production techniques, and the suitability of Maine for broiler production. These factors have combined to make raising broilers in Maine a profitable operation.



Through its processor-grower integration, the State's broiler producers have had an advantage in this competitive industry

An historic difference between the broiler industry in Maine and in other growing areas has been that of the integration of the industry. In Maine, most of the broiler operations are sponsored and supervised by processor-contractors who manage and retain ownership of the chicks throughout the growing period

The grower supplies buildings and labor for tending the chicks. In other areas, feed dealers own and supervise the growing of chicks. The integration of Maine's industry has had the advantage of the processor being more abreast of the market requirements and able to adjust to them more readily than would the feed dealer.

While Maine has had an advantage over other producing areas in the processor-grower integration, it still is faced with the problem common to the industry as a whole, that is, it has become extremely competitive, being characterized by many sellers and high production costs. At present, the broiler industry in the United States is composed of some 400 selling units which sell to some 20 to 25 supermarket chains. No one selling unit within the industry, either in Maine or elsewhere, is sufficiently large to deal on equal economic terms with these large chains.

High growing cost, due primarily to grain shipment, poses a problem

Cost of production is Maine's most serious problem. It primarily relates to the transportation of Midwest feed grain into the State. Other producing areas, notably the South and Middle Atlantic states, being closer to the Midwest grain growing area or being able to reduce transportation costs through waterborne shipment, have achieved a cost advantage over Maine's growers. These other areas, consequently, have a competitive advantage to the extent of approximately 0.6¢ per pound.

To achieve growth in the broiler industry, the following actions must be considered:

Strengthen sales organization

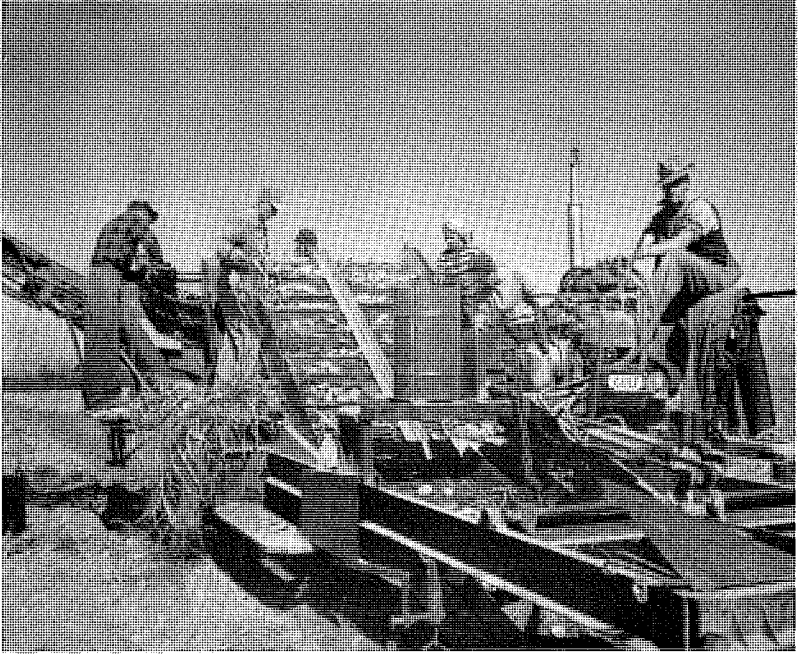
Increase promotion

Lower grain costs

Stronger sales organizations are required to equalize the present disparity between buyer and seller. It might be possible to have either large feed manufacturers or meat packing organizations diversify into broiler processing.

More promotion to sell Maine's product is also required. Since Maine's broilers are of recognized quality, it may be entirely possible to develop a brand preference in the sense of a state product — Maine broilers.

Cost of grain will likely present a problem unless transportation charges can be lowered. A number of possibilities present themselves: achievement of lower rail freight rates on grain, use of water transportation with grain storage in the State, combination water and truck cartage via Quebec, and the local raising of part of the grain requirements.



Maine's Potato Industry can Experience Increased Volume if the Industry Becomes More Market Conscious

Maine has an excellent area in Aroostook County for growing potatoes. This area is so ideally suited to this crop that almost any strain of potatoes can be grown. One result of this versatility of crop is that Maine has developed as the principal national source of potato seed. Recently, three major potato processing companies have constructed major production facilities in Maine; this involved a capital investment in plant and machinery in excess of \$5,000,000.

The quality of Maine's potatoes for processing and eating should be upgraded

Maine potato growers have not attempted to develop a spe-

cific strain for table stock and processing; rather, they have concentrated on potatoes for seed. Seed type potatoes are not easily utilized for table stock and processes; thus the quality of the Maine potato for this useage is considered less desirable than is the Idaho potato.

The farmer himself has had a natural resistance to upgrading his potato since, in many cases, he feels he can secure an adequate return on lower grade but higher yield. Maine processors, in addition, have appeared content to utilize the potatoes that are available and have not pressed for other species.

In the long run, this attitude will likely hurt Maine's potato production. For example, even within Maine itself, the Idaho potato is featured in some dining places. Such a situation most emphatically points out the desirability of growing strains more desirable for eating.

The industry is faced with inertia in its processing and marketing activities

The lack of a close relationship between growers and processors is believed to be one main reason for a lag in growing more desirable strains. Closer relationships with processor in growing potatoes would likely achieve two advantages:

- (1) the processor could specify the strain most desirable for his products and
- (2) more stability could be imparted to the industry if contracts were affected for portions of the growers' crop.

Promotion of Maine's potatoes is not intensive enough to capture a larger share of the market. While part of the consumer preference for potatoes from other areas, namely the Idaho, is due to the reported higher quality, it also is due to the lead western growers have in potato promotion. The Idaho potato, unfortunately for Maine, has become almost a generic term. It can command a premium price based on the promotional image of the desirability of Idaho potatoes. Maine's producers should strive to create a similar favorable image of their product on consumers.

Maine's potato industry can capture more of the market if:

Quality is improved

Processing is increased

Marketing is intensified

To increase its share of the market, Maine growers must re-grade potato quality in terms of growing those species which are most desirable for table stock. With a more desirable product to sell, a larger share of the market, especially the growing Eastern and Midwestern market, could be captured.

In its endeavor to expand volume, the industry should also look to increased processing activities. At present those processed products for which market demand is established can be produced . . . items such as frozen french fries, potato flakes, etc. Other end uses for potatoes such as chemical processing or alcohol should also be studied for diversification opportunities.

On the marketing side, further development of grower co-operatives appears desirable to strengthen the grower's market position. Greater promotional effort might also be well directed toward creating a more favorable image of Maine potatoes in the eyes of the consumer.

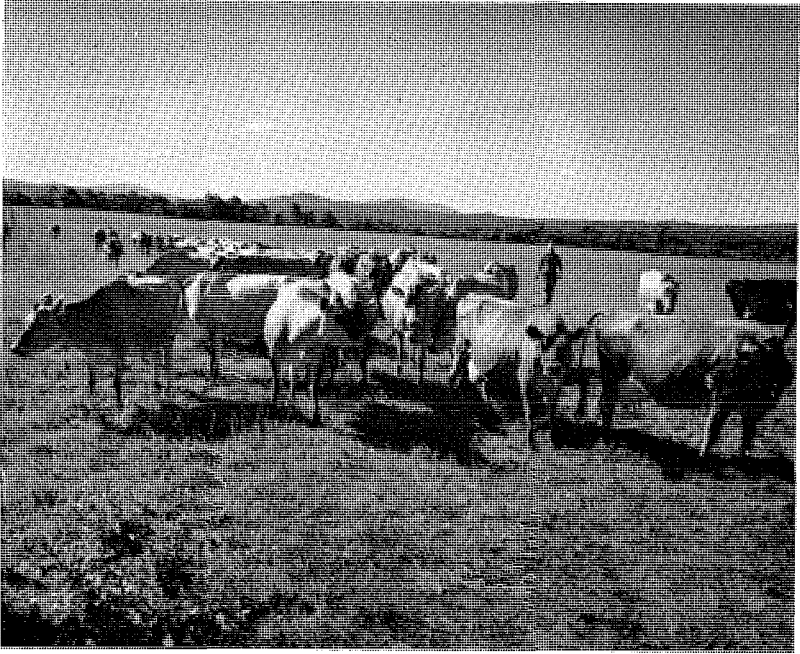
Maine's Dairy Industry is Expanding Gradually; the Future can be Optimistic

Maine's dairy production is almost entirely in the fluid milk area rather than diversified through a range of manufactured dairy products such as cheese, ice cream mix, and the like. The major reason for concentration in fluid milk is that this market is much more remunerative to the producer than is the market for manufactured products.

Over the past ten years, Maine's milk production has increased at the relatively low growth rate of less than 1% per year. For the future, an increasing demand is anticipated from out-of-state consumption.

The dairy industry is characterized as being a part time activity of many small producers

Dairying in Maine has been particularly characterized by the farmer who milks a few cows to supplement his other farming



activities. Being a marginal activity and one that has been mainly a side-line to farmers, dairying has never really achieved a foothold in Maine as a major contributor to the State's economy. Farmers with few cows have not been particularly active in improving their stock or increasing production. If costs of production go up, they are inclined to drop out of dairying. As a result, the number of Maine farms selling milk has decreased about 50% since 1944.

The major problem the industry faces is high production cost

Milk production costs in Maine are high. This is a result of two factors: inefficient management and high grain costs. Perhaps the historically limited local market supplied by Maine producers did not encourage them to become low cost dairymen. Now, however, Maine producers are faced with the fact that dairymen in other New England states have been more competitively inclined and, as a result, have utilized more efficient techniques to reduce the cost of operation. Although Maine dairies directly ship over 50% of their milk into the Bos-

ton market, a large portion of this volume is accounted for only because the market has grown in size at a rapid rate. It will require low cost production to match competition and maintain future growth.

Feed costs represent about 38% of the total cash expenses involved in dairy operation. The relatively high cost of Mid-western grain delivered in Maine has also been one of the deterrents to lowering production costs.

Increases in population should encourage Maine dairymen to seek a larger share of the market

Since much of the dairy land in the Southern part of New England is being converted into housing and industrial sites, other supply sources for dairy products will have to be increasingly established. Maine dairymen, by becoming more management conscious and reducing operation costs, can capture a larger share of the growing market for milk in the Boston area.

Some of the possibilities to be explored in reducing costs are the development within the State of improved forage crops, utilization of potato waste and other locally grown commodities for the feed ration, and reduction of the transportation costs of grain. Maine's farmers should look to dairying as a full-time occupation, increasing the size of herds, concentrating on higher production per cow, and utilizing more modern techniques in dairying activities. Attention must be directed toward better breeding and the use of high value feed concentrates to enhance productivity.

Food Products — Fisheries

The Fisheries in Maine Can Grow, but at Present They Are Boggled Down by Tradition

The fishing activities in Maine are fairly extensive, consisting of four important commercial types: lobsters, red fish or ocean perch, herring, and the inter-tidal species. At present, lobster volume accounts for the largest portion of the total activity as is apparent from the following table:

LOBSTER LANDINGS AND IMPORTS

Year	Maine Landings (000 lbs.)	U. S. Landings (000 lbs.)	U. S. Landings and Canadian Imports (000 lbs.)
1929		11,747	51,792
1950	18,353	23,194	73,334
1951	20,759	25,943	74,911
1953	22,300	28,102	74,620
1955	22,718	28,939	74,898
1957	24,403	30,152	74,774

SOURCE: Maine Department of Sea and Shore Fisheries

Because of its importance to the economy, the lobster fishery was studied in detail; the scope of the program did not permit detailed consideration of the more minor fishing activities.



While growth has been experienced, the lobster industry is marginal and unprogressive

Over the last decade the lobster landings in Maine and in the

United States have increased; Canadian imports have declined slightly. The major reasons for this growth are increased intensity of fishing due to better prices, improved boats and equipment, and the finding of new lobster populations.

The dealer has traditionally been the key factor in the industry. Frequently he finances the fisherman and assumes all

PORTION OF TIME THAT LOBSTER AND CRAB FISHERMEN ARE ACTIVELY ENGAGED IN FISHING (1957)¹

No. of Months Fished	Percentage of Fishermen Fishing
1	.9
2	3.9
3	13.4
4	12.5
5	12.9
6	16.5
7	5.7
8	7.0
9	5.1
10	3.7
11	1.0
12	17.6

¹ Only those reported on license applications. Size of sample — 65.5%. Total number of lobster and crab fishermen licensed — 6,068

SOURCE: Maine Department of Sea and Shore Fisheries

marketing functions. Of the 200 to 300 licensed dealers in Maine, only 20 to 25 are considered major operators: the remainder are small operators with limited financial capability.

The majority of the dealers operate on a marginal basis. Continually faced with moving a perishable commodity, subject to sudden price changes, the dealer is always in a precarious marketing position. Often he must dump his lobster to cover operating commitments.

Lobster dealers have only been interested in dealing with the live animal and have not been interested in exploring opportunities in processed lobster. This lack of interest is partially explained by the fact that there is a sizeable loss of meat in processing and that in the past most packaged products of this nature had little market success; now, packaged products are practical and widely accepted. Of key significance, however, is the fact that the traditional lobster dealer has resisted change in any form; the feeling being that increased processing activities will decrease dealer control of the industry.

The lobster industry is faced with three major problems:

Disorganization at the fishing grounds

Weak marketing position

Lack of research

The major problem in the production side of the lobster industry is in the state of the fishing grounds and the attitude of the lobster fishermen toward these grounds. Each fisherman tends to take as much lobster as he can within legal limits. Actually, by letting the lobster grow to a more mature size, the fishermen would earn larger returns. But the philosophy has been to fish on a "first-come, first serve" — "take all you can" basis.

Dealers ship to either institutional customers directly or to the New York fish market which establishes price. This marketing pattern permits the lobster dealer very little price control and, as previously mentioned, only a few dealers have the financial resources to exert influence over their marketing relationships.

Research into new markets, techniques of processing, and shipping have been resisted by dealers in the past. This is true even though transportation of live lobsters is still a problem and the promise of larger markets exists in the development of large scale circulating salt water tanks throughout the country to maintain live lobsters.

To expand operations and promote stability, the lobster industry in Maine needs to exercise more control over production and to research new fishing and marketing techniques

From an economic standpoint, a more reliable supply of lobster is needed to provide stability in the industry and to enable wider national distribution techniques to be profitably effected. Maine fishermen must develop this reliable supply by improving catching techniques, holding (temporary storage), and distribution. Use can well be made of tank operations at divergent points throughout the nation to supply the local market at these locations. It is conceivable that should the present Maine industry not effect these improvements in supply and distribution, a growing market demand for lobster could encourage Mid-

western and Western tank operators to integrate backwards — into wholesaling operations and perhaps even to the point of dealing directly with reliable fishermen.

The possible development of frozen lobster might be an alternate to distribution techniques such as the salt water tanks mentioned above. The advent of such a development would have considerable impact on stabilizing the industry. More research is required in this area as well as in the actual techniques of fishing, to effect the stabilization, control, and profitability of the lobster industry in Maine.

THE SHOE AND LEATHER INDUSTRY in Maine Has Shown Increasing Importance in the Last Several Years; Its Future Appears Favorable

The Maine shoe and leather industry is one of the stronger of the growth industries in the State and has accounted for 14.7% of the value of all manufactured products in the State (1958). The chart below shows the favorable increase in the industry's volume since 1953. Most of this volume relates to shoes since shoe manufacturing accounted for 85% of the total product value produced; leather tanning and finishing, leather findings and miscellaneous leather items account for the balance.

LEATHER PRODUCTION IN MAINE



The future also looks bright; the Maine shoe industry can be expected to grow. Being closely correlated to population growth, the anticipated increased population should create new large demands in the next decade; where population in the United States, for

example, increased 22% between 1947 and 1958, the U. S. production of shoes increased 25%. If the same correlation continues, an increase of 17% to 20% appears feasible in this decade.

Labor and Operating Conditions for the Industry Have Proven Satisfactory in Maine

The shoe industry's labor force in Maine has generally proven productive and adaptive. Union relationships have been good where they presently exist (approximately 20% of the workers are members of unions). Workers themselves have been admirably productive in their operations and have historically accepted new techniques and developments. For the most part, suitable workers have been abundant and the only problem currently experienced is a minor amount of absenteeism encountered in a few areas.

Labor cost varies somewhat throughout the State but is considered competitive with the wage scales in other Maine industries. The wages, being somewhat below those in other areas, has enabled the Maine manufacturers to remain competitive in the industry by offsetting somewhat the higher transportation costs they incur.

Capable supervisory and clerical help for this industry are difficult to find within the State. It is a common problem to find that skilled personnel are in demand and usually are hard to find. This can also be extended to management personnel who are not being trained to the extent required by the industry.

Other operating conditions such as business climate, facilities, taxes, and so forth, have been favorable to the industry. Thus, the combination of the excellent labor situation and operating conditions has contributed immensely to the growth of this industry in the State.

A Few General Problems Exist:

High Transportation Cost

Raw Material Cost

Inadequate Banking Relations

Transportation costs are important because Maine manufacturers must ship their products into, and compete in the important markets in the Midwest and South Central states. The actual cost

of bringing the raw materials into the State is borne directly by the shoe manufacturer; the cost of shipping shoes to customers is borne indirectly since adjustments must be made in the sale price to compete favorably with products made in other geographic areas. In low priced shoes the transportation cost adjustment is particularly noticeable since it comprises a fairly large part of the total cost; in higher priced shoes, transportation cost is not so significant since it constitutes a smaller portion of the total cost of the product even though the cost of shipment is about the same per unit as in the lower priced lines.

A reduction in the cost of raw material might be effected by increasing the amount of tanning operations in the State. Most of the large manufacturers presently obtain their leather through the Boston leather market. It is conceivable that a favorable cost of tanning in Maine could be effected which would more than offset any increase in the transportation cost of shipping untanned hides to the State. The tanning of lighter weight hides which are used in the more expensive shoes would be particularly attractive.

The shoe and leather companies could also benefit from closer ties with local bankers and a greater use of local banking facilities. Many shoe manufacturers presently go outside the State for most of their long term financial needs; some believe Maine banks cannot handle their requirements, others indicate that Maine banks are unsympathetic to the industry — believing it to be an unstable business; and finally, others borrow out of state to keep certain proprietary information confidential. It would appear that closer relationships with local banks help to increase loan activity in the State and would encourage the expansion of existing concerns. In addition, the industry would be provided with a valuable source of professional counsel with regard to financial consideration in new products, markets, and operations.

Growth Opportunities for the Shoe Industry Include:

Upgrading Product Lines

Diversification into Personal Leather Products

Tanning Operations

Maine shoe manufacturers may increase their market by expanding into the production of higher quality shoes. An appre-

cialable market exists for medium priced footwear, and while this area is competitive, Maine manufacturers should be able to effectively serve this market. The production of medium quality shoes is recommended for Maine producers since the skills involved in the production of medium quality shoes are relatively comparable to the skills necessary in the generally lower priced lines presently being produced. In addition, medium priced shoes do not encounter the frequent style changes inherent in high priced shoe lines; thus, they present a relatively stable type production item for Maine's manufacturers. Transportation costs, by constituting a smaller portion of total costs should generally contribute to enhancing the profitability of operations.

There also appears to be a profit opportunity in the production of medium priced wallets, handbags, and other personal leather articles. These products utilize many of the same fabrication skills required in the manufacture of shoe uppers and, having a high value to weight ratio, diminish transportation cost problems. Tradition, up to now, has deterred shoe manufacturers in general from producing these other lines; Maine manufacturers can however, secure an appreciable advantage by pioneering efforts in this direction.

The tanning operations provide not only an opportunity for greater control and potentially lower cost, but also for increased employment opportunities in the State.

TEXTILES

The State of Maine, from a Realistic Appraisal, Can Expect a Continued Decline in Cotton Textiles and a Possible Stabilization of the Woolen Textile Industry

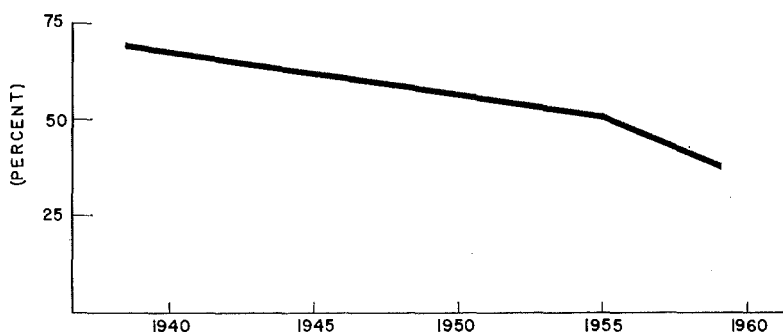
New England is now relatively unimportant as a producer of cotton textiles and moderately important as a producer of woolens. In 1925 New England consumed 26.5% of the cotton used in the textile industry, by 1950 it consumed only 7.5%. The reasons for the decline of cotton textile activity has been the lower wage rate and transportation advantages in raw and finished materials in the South and an increase in imports of cotton yardage.

The situation in the woolen textile industry is somewhat similar to the experience in the cotton segment: decline has been experienced, however, more recently some stabilization has appeared.

Woolens have primarily been affected by a 35% drop in total wool consumption from 1948 to 1957, a decrease of 40% on a per capita basis, and also by an increase in imports.

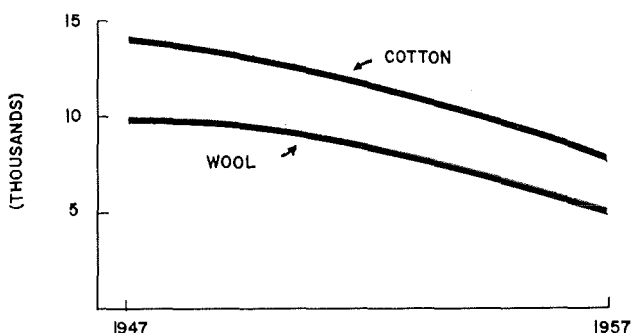
In Maine, these industries have followed the pattern of New England. The following chart shows Maine's production trend in textiles that has been experienced from 1948-1958. The comparatively recent, rapid decline in cotton production is quite apparent. Since World War II, however, the decline of the woolen industries has been less severe than in cottons.

PERCENTAGE OF LOOMS IN NEW ENGLAND



Employment has followed the pattern of production and has been dropping steadily as the chart below illustrates. Total employment

TEXTILE EMPLOYMENT IN MAINE



in the woolen and worsted plants declined 55% from 1947 to 1957; in cotton, it decreased 44%.

The future of the cotton industry appears dim but woolens could likely stabilize in the near term. Realistically, there appear to be no good reasons why cotton textile production should remain in the State unless it would be to exhaust production facilities presently available. Being generally associated with large corporations, the textile firms are governed by management groups who are concerned with maximizing profit. If this can be more favorably accomplished in the South, they will move. In the woolen industry, the majority of firms remaining are medium to small family owned and operated. These owners have a home state preference, wanting to work and live in Maine. In addition, their major asset, the plant building itself, would be difficult to sell if they moved out and would be likely, therefore, to represent too great a loss to those smaller companies. It can be expected that most of these woolen and worsted firms will remain in the State at least through the next generation.

Operating Costs Have Generally Been Unfavorable and Have Likely Been Influential in the Low Capital Investment of the Industry

Wages have been a problem in the cotton textile industry where much of the State's unionization exists. Cotton company executives have claimed that the continuous pressure for wage increases exerted by union officials virtually forces companies to elect to move South. These companies have also claimed that the unions have been somewhat uncompromising in their efforts to prevent companies from taking full advantage of production efficiencies which could result from new equipment. This has widened the technological gap between the older plants in Maine and the newer, better equipped plants in the South.

In the woolen industry, the activities of the unions appear to be of a different nature. Inasmuch as many woolen companies are owner-managed, the woolen workers feel that they have close personal relationships with the individuals who maintain financial control over the companies and will, thereby, receive fair treatment.

With the exception of wages, raw materials shipping costs represent the most significant economic problem to Maine cotton

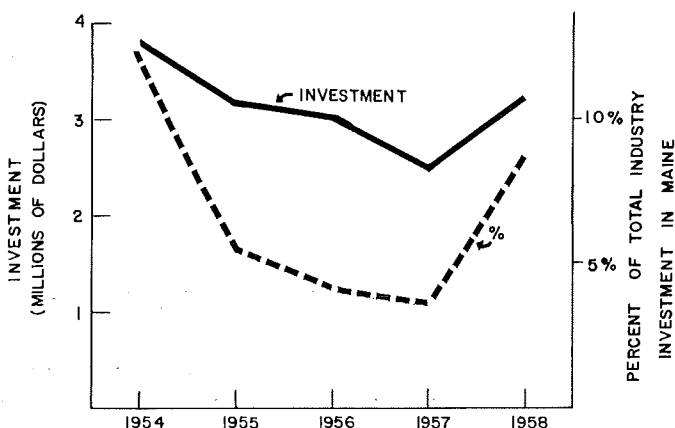
textile plants. Transportation costs are about 4% of the raw material; this has the effect of subtracting about 2% from the margin available for before tax profit for a cotton textile producer in Maine as compared to one in the South.

The woolen industry mainly uses imported and domestic stock purchased through the Boston wool market and does not appear to be at an appreciable disadvantage in comparison to the South.

In shipping finished goods, Maine producers are at a disadvantage in shipping to the Midwest and, in some cases, to the Middle Atlantic states. In addition to differences in distance, the rates charged by Northern carriers are reported to be higher than those charged by carriers in the South. This rate differential has also contributed to placing producers in Maine at a disadvantage.

The investment in new plant and equipment has been very low in the cotton segment of the industry and only moderate in the woolen segment. The increasing difficulty of operating a cotton textile manufacturing establishment in the North has discouraged many companies from investment in new facilities. Many woolen companies, on the other hand, believe expansion opportunities exist for their northern operations and are purchasing new equipment and making additions to their plants; this has represented most of the investment in new facilities in the textile industry in Maine. The chart below shows the pattern of investment in rela-

TEXTILE INDUSTRY EXPENDITURES FOR NEW PLANT AND EQUIPMENT IN MAINE



tion to all Maine industry. Although the product value of the industry has exceeded 10% of Maine's total manufactured value, the industry's investment has accounted for considerably less.

Some of the More Minor Factors Influencing Textile Operations in Maine are Water Pollution, Power Cost, and Finance

Executives of cotton and wool factories which do their own dyeing and converting, expressed concern about the recent water pollution investigations. They were concerned with any problems which might arise and wished to be appraised of the manner in which they could cooperate to achieve correction and prevention of pollution.

High power costs were frequently mentioned as contributing to excessive operating costs. These are important but since they only account for about 1% of total manufactured value, they are less significant than other more pressing problems. The high heating costs are believed to be compensated by the lack of extensive humidity control which is required by producers in the South.

Most of the companies in the textile industry use Boston banking facilities for large capital requirements. The textile executives claim that Maine bankers look unfavorably upon the textile industry because of its cyclical sales behavior and competitive problems. A greater degree of cooperation between the banks and particularly the woolen textile firms might have the advantage of securing more sophisticated financial management for the industry and may provide some basis for expansion.

Major Effort Should be Directed Toward Strengthening the Woolen Segment of the Industry; the Opportunities Lie in Product Diversification and in Employing Executive Caliber Operating Personnel

The problems of the cotton textile industry in the State of Maine are so imposing that this segment of Maine's manufacturing activities should be expected to continue to decline. It is believed that the woolen industry currently is in a stronger position and that its future prospects are relatively favorable.

Both woolen and cotton textile companies, to maintain the best position possible, should concentrate on the active promotion of

branded products. More advertising should be directed toward achieving customer preference for branded and packaged products.

Maine's woolen industry should also take a look at the profit potential which can be achieved by manufacturing fabrics from man-made fibers. These have been gaining in importance in recent years; the noncellulosic yarns (nylons, acrylics, protein, etc.) appear to have the most favorable future.

A potential product diversification area also exists in the manufacture of woolen apparel in the State. Maine should experience an advantage in establishing clothing fabricators in the State since northern woolens are considered superior to their southern counterparts. Maine has a labor force which possesses a high degree of manual dexterity and being an important producer of woolen goods, it would seem to present a good opportunity for apparel manufacture. In addition, Maine's close proximity to the major apparel centers in New York City and its tax advantages could influence companies to establish profitable subsidiary operations in Maine, while maintaining principal sales and designing offices in New York.

The woolen industry should also seriously consider the employment of executive calibre operating personnel so company principals can maintain a closer relationship with markets and customers. Most woolen firms at present are "management poor". Company principals find themselves with less and less time to spend in the market place. This has the effect of loosening ties with customers and limiting exposure to style and product trends. Consideration, therefore, should be given to either hiring suitable assistants or training junior executives in the business.

In conclusion, Maine's industries provide a good base for growth:

INDUSTRY

OUTLOOK

PULP AND PAPER Moderate Increase

LUMBER Good

WOODWORKING Excellent

FOOD PRODUCTS:

Broilers Dynamic

Potatoes Very Good

Dairy Favorable

Lobster Can Grow

TEXTILES:

Cotton Poor

Wool Stable

Chapter Four

NEW ECONOMIC ACTIVITIES WITH GROWTH POTENTIAL FOR MAINE

In this chapter, the potential for Maine's future economic growth is discussed in terms of new opportunities that can flourish within the State. The word "new" is used here in a broad sense to include those types of growth activities that may presently exist within the State to some small degree as well as those that are completely new.

The search for identifying new opportunities for Maine entailed an extensive analysis of trends in technological developments, in new products, in growth industries, in population, and in consumer preference. Specialists who deal with the technical areas that were under consideration and with forecasts of economic growth participated in this comprehensive analysis.

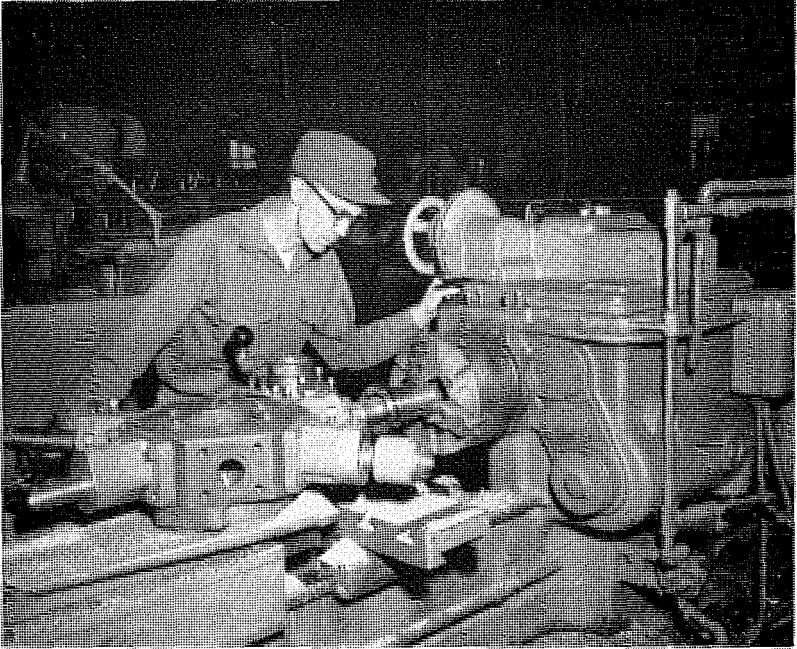
This search for new opportunity showed one important fact, and, that is, many types of economic activity are feasible for operation in Maine. A list of over 30 **good** economic possibilities was developed. From this list, nine were selected as representing the **most** promising opportunities for the State to concentrate its activities on at this time; these are:

- Light Metal Fabrication**
- Recreation Equipment**
- Specialty Printing**
- Confectionary Products**
- Trailer Production**
- Electronics**
- Pharmaceuticals**
- Products from the Sea**
- Recreation and Tourism**

In selecting these economic areas as most promising at this time, one of the basic objectives was to match the requirements of the economic activity to the assets of the State. Furthermore, those activities that were deemed most desirable were the ones that could

grow in the future, could suit the characteristics of the State and its people, and finally, could encourage growth and opportunity in additional related areas.

Each of the suggested activities is reviewed separately in the following discussion.



LIGHT METAL FABRICATION Offers an Opportunity to Increase the Skills and Wages of Maine's Work Force

The light metal fabrication industry encompasses a wide range of activity, extending from cutlery and tools to the more technical areas of instruments and computers.

A long term growth has been experienced by the industry for some time but has varied with specific products; some representative products with their volumes and rate of increase are shown on the following page.

VOLUME OF SELECTED METAL PRODUCTS

Volume (Millions)

	<u>1947</u>	<u>1957</u>	<u>Percent Increase 1947-1957</u>
Cutlery	143	191	34
Hand Tools	273	312	14
Hardware	578	1,359	235
Office Machines	179	346	97
Computers (all types)	294	1,008	350
Instruments	1,140	2,129 ¹	86 ¹

¹ 1947-1954

SOURCE: United States Department of Commerce

The Industry, Located Primarily in the Northeast, Will Experience a 27% Growth in the Sixties

The light metal fabrication industry over-all is expected to grow about 27% in the sixties. Many specific products, however, will grow at much greater rates. Instruments and controls, for example, are expected to double in volume as will office machinery.

The industry is largely located in the Northeast sector of the United States; over 90% of cutlery production is situated here, as is 40% of hand tools and office machines, around 50% of computers, and over 60% of instruments.

Maine's Labor and Market Position Can be Particularly Attractive to the Industry

This industry appears to be particularly suited to Maine for a number of reasons. The State has a labor force which has exhibited a high degree of dexterity, a prime requisite in machining and assembly activities. Maine, in addition, being close to the densely populated areas of the Northeast, is also close to a large market for the products of the industry. Light metal fabricated products, for the most part, are relatively high value, low weight items which would not present Maine producers with a cost of shipping disadvantage; this is particularly true in the more advanced fields of instruments and computers.

The industry appears economically feasible for location in Maine, and would be particularly desirable since it would be conducive to increasing the skills and wages of the younger members of the work force.

RECREATION EQUIPMENT Offers Excellent Growth Opportunities

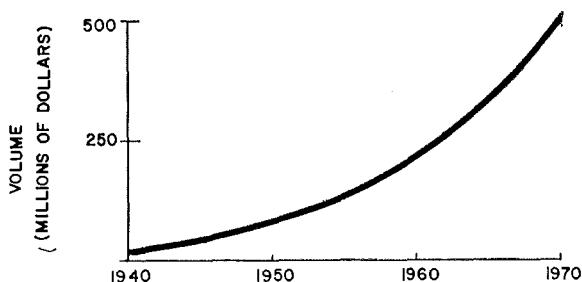
The recent national increase in available leisure time and discretionary income has permitted more people the opportunity to participate in sports and recreation activities. Thus, the recreation industry will continue to grow in the future and so will the demand for recreational products.

The recreational products industry covers a wide variety of items ranging from golf clubs, balls, tennis rackets, on into boats and bowling balls. The industry is generally optimistic about its future, anticipating that virtually all areas of it will grow substantially in the sixties. One of the primary areas suggested in this field for Maine is boats.

The Boat Industry is Expected to Grow 100% in the Sixties; It Presently is Located in the East and Midwest

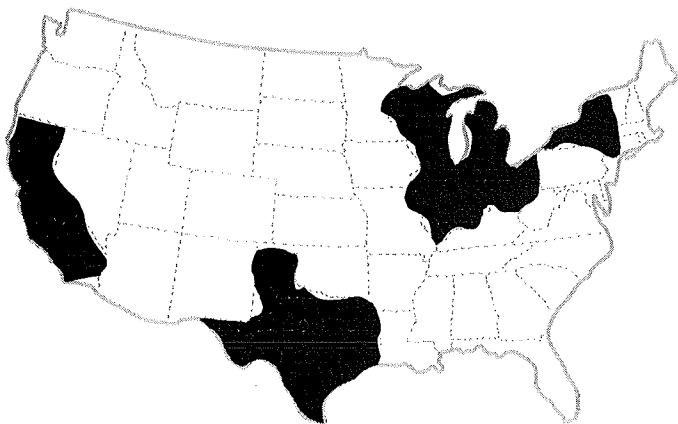
In 1941 the sales of boat manufacturers totaled \$21 million, by 1959 this had increased a fantastic 1,070% to \$225 million. By 1970, the industry is expected to climb to \$500 million, a skyrocketing increase as the chart illustrates.

BOAT SALES



While the industry presently is scattered throughout the country there is a fairly heavy concentration of boat manufacturers in the Eastern and Midwestern sections. In the chart below is shown the manufacturers of general lines of boats.

LOCATION of BOAT BUILDERS



Boat Building Admirably Fits the Industrial Characteristics Desired by Many Maine Communities

Today, the manufacture of boats is still mainly a job shop type operation with considerable hand work involved. A large portion of the smaller craft are basically of wood construction; 65% wood, with 20% of metal, and the balance, 15%, of plastic. A trend toward the increased use of plastics appears to be developing at the present time and could rapidly grow in the sixties. Both the metals and plastic, which refer primarily to aluminum and fiberglass, are also adaptable to the small job shop operation; the fiberglass in particular, is closely related to many of the wood-working skills and could well serve to broaden the base of a shop utilizing such production techniques.

Maine offers many features which are well suited to this industry, thinking in terms of all types of recreation equipment. There presently exists an abundance of working force with potential craftsmen's ability in the State, materials are readily available — in some cases the lumber requirements can be produced within the State, and a relatively high value to weight situation exists in consideration of shipping. The production nature of the industry, being generally of a job type operation involving considerable hard work, lends itself well to the character and desires of many Maine communities.

One of the largest pluses in favor of this industry is the nearby market for the products. As vacationing in Maine as well as in New England as a whole increases, the regional demand will increase. The large population centers around New York and Boston — as well as the Midwest — places Maine in a favorable position to service the requirements of this vast market.

Again, it is important to look to producers of various recreation products, golf clubs, skis, bats, gloves, and so on — in addition to boat producers. All of these recreation products are well suited to production in Maine.

SPECIALTY PRINTING—Maine's Printing Industry Can Grow by Expanding into Specialty Types of Printed Products

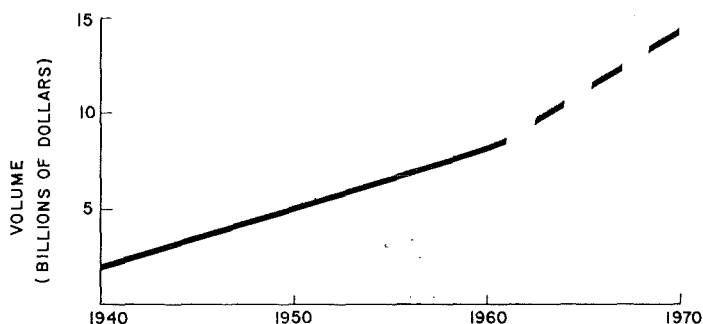
The more specialized activities in custom printing . . . items such as stationery, folders, promotional material, business forms, books, pamphlets, and so forth . . . offer a good opportunity for the expansion of Maine's printing industry. The industry in general is experiencing increased activity due to the growth in population and to increased interest in publications of various types.

Specialty Printing Will Increase 60% in the Next 10 Years; the Industry Presently is Located to a Large Degree in the Northeast

The expansion in volume of 60% in the sixties will be influenced by a number of trends: larger school populations, more comprehensive use of business forms, enlivened interest in books and periodicals, and a preference for custom and distinctive brochures and personal stationery. The chart below shows the volume historically and the future expectations for the industry as a whole.

SPECIALIZED PRINTING VOLUME

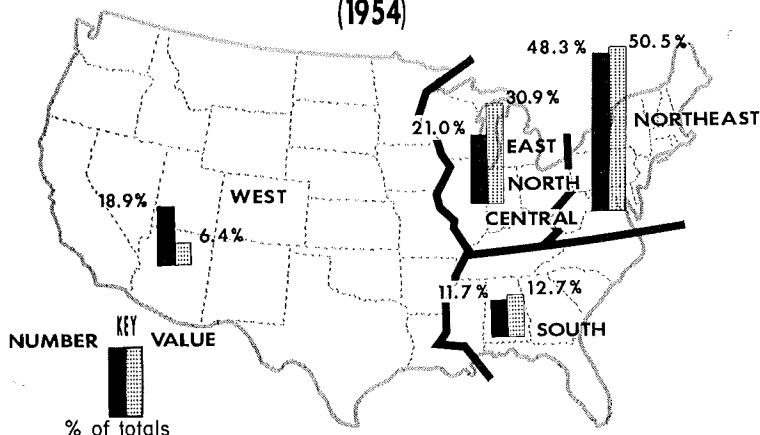
(VALUE ADDED BY MANUFACTURE)



The growth of specific products will vary in considerable degree as they have in the past: for example, in the period 1947-1957, business forms have increased 480%, books and pamphlets 150%, greeting cards 137%, calendars 295%, catalogs 110%, and so on.

At the present time the Northeast houses 4,307 printing establishments,¹ almost half of the total in the country; the value added in manufacture is \$1,627 million, also approximately one half of the total as shown in the illustration.

PRINTING ESTABLISHMENTS and VALUE of SHIPMENTS (1954)



This Industry Offers Good Potential Especially in Increasing the Skills of Maine's Younger Generation

Maine's potential for the printing industry arises from its adaptive work force, its opportunity to provide generally lower operating costs, the internal source of paper, and its close proximity to important established publishing and editorial offices in Boston and New York. Cost of transportation appears to offer no problem; special mail rates permit printers in the Southwestern part of Maine to ship to the Midwest at the same cost as can publishers situated in either Boston or New York.

The operations of a printing plant, especially in the larger plants, require skilled labor. Training time for a printer, as es-

¹ Excludes newspaper publishing

established by the Maine Apprenticeship Council, is a minimum of four years. The development of this skill should be particularly attractive to the younger generation in Maine. It can offer them stability in employment as well as one of the highest wage rates found in New England.

Smaller printing firms offer the opportunity for expansion of activity while still permitting the training of the labor force in the skills of the trade. Once a sufficient number of skilled personnel would be available, growth can be expected both by expansion of present firms and the added attraction of larger ones.

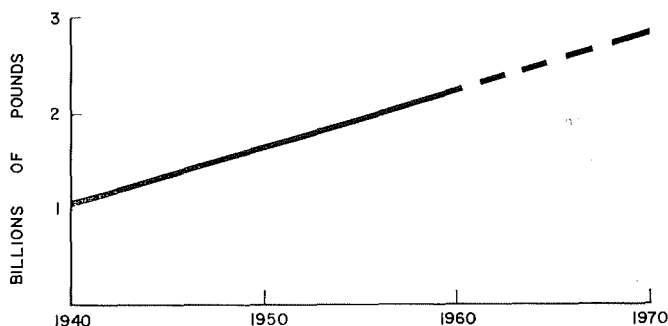
CONFECTIONERY PRODUCTS Can Offer Maine the Opportunity to Increase In-State Processing of Raw Materials

A wide variety of goods are included in confectionery products; hard and filled candy, toffees, nougats, fudge, coated fondants such as chocolate creams, chocolate covered nuts and fruits, and so on.

The Confectionery Industry has been Stable; Its Volume is Likely to Increase

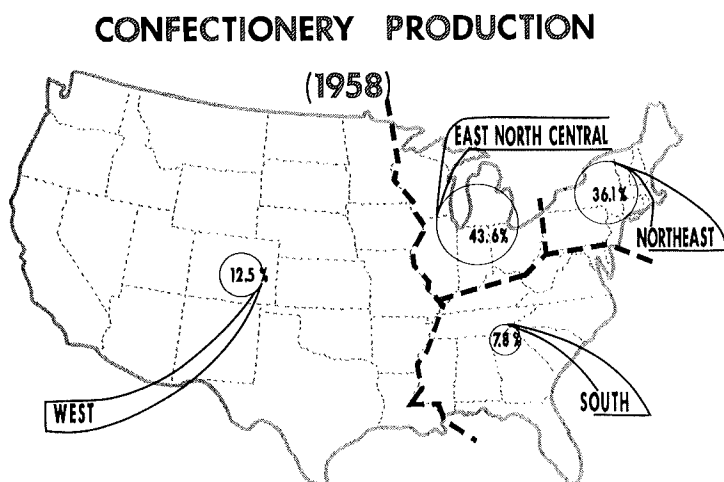
The industry has been fairly stable in the past, though a leveling has been in effect through most of the fifties. Indications presently are that a greater increase will be experienced in total production in forthcoming years. The trend in the industry is shown below:

U.S. CONFECTIONERY PRODUCTION



The stability that is apparent from the chart coupled with a substantial export potential (Canada is the leading nation importing candy from the U. S.) and the large eastern market warrants Maine's consideration of this industry as an economic growth opportunity.

Production of confectionery products in the United States is primarily divided between the Northeast and East North Central regions. The chart below shows the current production areas of confectionery products in terms of pounds produced. In 1958, about 36% of total domestic production originated in the Northeast and 43% in the East North Central states.



The Industry, by Increasing In-State Processing, Can Help to Expand Other Industry Also

This industry offers Maine the opportunity to increase the integration of its raw material production, speaking broadly, to a manufactured product. In the production of confectionery products, the principal ingredients are cocoa, sugar, milk, and eggs. In any U. S. location, sugar and cocoa are primarily imported but in Maine, the other two items, milk and eggs, could likely be produced near the plant site. Thus, Maine could make strides toward internal processing — doing as much work within the State as is possible — with the objective of shipping out virtually a completed product.

Maine should look to firms producing packaged products since these lend themselves to the situations of requiring hand dipping and packaging, a relatively high value to cost relationship and also to a relatively constant demand. The adequate supply of labor, plant sites, and generally favorable operating conditions would appear to offer potential firms an excellent inducement to establish operations in Maine.

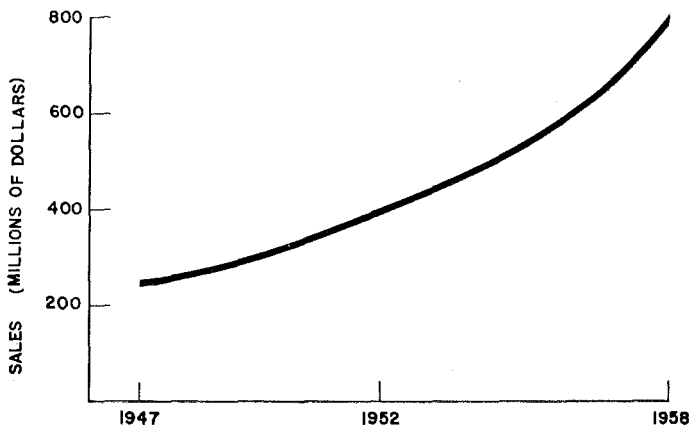
TRAILER PRODUCTION Can Be Aimed at the Growing Market in the Northeast

Trailers, as referred to here, include primarily mobile homes and travel trailers. Mobile homes are the larger units which are considered to be semi permanent dwellings; travel trailers are the vacation trailers, so to speak, which are designed to be pulled behind an automobile. The average selling price of a mobile home in 1959 was \$5,500.00; the travel trailer average price was \$1,800.00.

Sales of Mobile Homes and Trailers are Likely to Triple in the Next Decade; Presently 55% of Sales are Made in the East

In the last decade, the volume of mobile homes has tripled. The trend in industry sales is shown below.

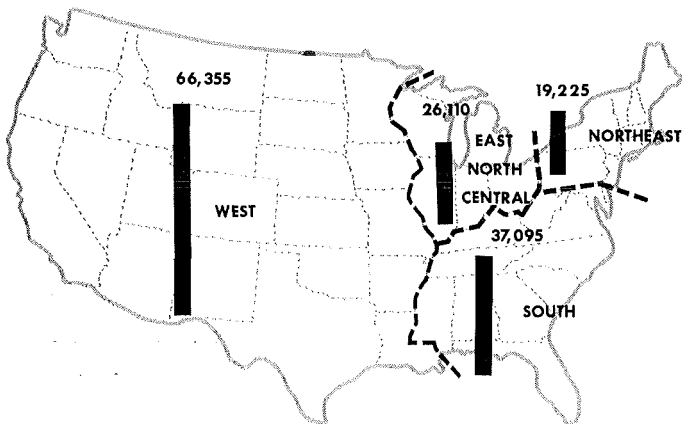
U.S. MOBILE HOME AND TRAVEL TRAILER SALES



From present indications, growth in the succeeding decade should exceed that of the present. The future in the construction of mobile homes appears exceedingly bright.

The geographic distribution of mobile home sales is shown in the chart on the following page. Note that the Northeast region accounts for about 13% of the 1959 purchases. To Maine alone, 1,225 mobile homes and trailers were shipped in 1959; New England shipments totaled 5,100.

MOBILE HOME SALES 1959



The Construction of Mobile Homes is Closely Akin to Job Shop Woodworking Operations and Appears to be "A Natural" for Maine

The requirements of the mobile home industry are particularly suitable to Maine. The typical mobile home manufacturing operation is small to medium in size and of a custom nature; this lends itself well to many small towns in Maine. Semi to unskilled workers can be employed fruitfully. In addition, much of the work presently evolves around the woodworking industry, an area where many of Maine's workers have experience.

Most mobile homes and trailers today are built in a custom job shop, requiring a large amount of hand work in fabrication and in assembly. Various materials are employed in construction; a steel frame forms the base, a wood frame fashions the sides and roof, and exterior surfacing materials include Masonite and aluminum. On the interior, wood paneling is most frequently used.

The ease of transport of the finished product would permit Maine producers to readily service the growing market area in the East. Shipments might also be conceivably made to the Southeast where a vast market presently exists.

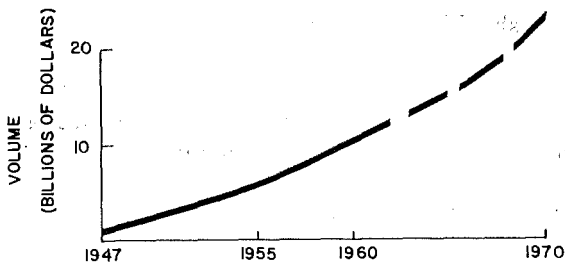
ELECTRONICS — The Continued Growth in Electronics Products Can Influence Maine's Planning for Economic Expansion

Electronics is one of the major growth industries of the past decade that will continue its rapid rise through the sixties. The products of the industry may be grouped into six major categories: consumer products, military electronic equipment, commercial and industrial electronic equipment, electron tubes, semi-conductor devices and other electronic components.

The Electronics Industry¹ is Expected to Increase its Volume by 200% to 300% in the Sixties; It Presently is Located Close to Maine

Electronics will double and perhaps even triple in volume by 1970. In 1947 the industry volume was \$1.7 billion, by 1960 it attained an estimated \$10.0 billion, a 490% increase, as noted on the chart on the following page. Some trends presently apparent in the industry, will contribute to its future growth. Foremost among these are miniaturization, microminiaturization, and molecular electronics. Another important trend is toward the fabrication of components as part of the equipment assembly process, an example of this being the development of "complex components" and complete equipment sub-assemblies.

ELECTRONICS VOLUME



¹ includes radios and related products, electronic equipment, electronic tubes, semi-conductor devices and electronic components.

A large part of the electronics industry is situated in the Northeast. As the table below shows, almost one half of the electronics producers are located in this region.

LOCATION OF ELECTRONICS PRODUCERS (1954)

(Radios, electronic tubes, telephone equipment, and related communications equipment)

Region	Establishments		Employment	
	Number	Percent	000's	Percent
Northeast	1006	47.3	215	48.9
East North Central	586	27.6	148	33.7
South	149	7.0	35	8.0
West	384	18.1	42	9.4

SOURCE: U. S. Department of Commerce

Maine has Features Which are Compatible to Electronics Manufacture

The electronics industry has many features adaptable to Maine. In this industry a large amount of hand assembly work prevails. In many cases, women can be used to assemble the light items, utilizing hand power tools and production line equipment to facilitate operations. The situation of high-value, low weight generally prevails; the cost of transportation would therefore present no problem. Lower operating costs should provide Maine manufacturers with an advantage that would permit Maine companies to remain competitive.

Being close to the extensive research activities around Boston would provide Maine manufacturers a distinct advantage. Technical personnel could readily keep in close professional contact with research developments and perhaps even participate in them.

Maine should take advantage of the apparent desire of Northeastern firms to remain in the area and should direct its attention to securing additional firms in the industry. While some smaller firms would find the advantages of a Maine location conducive to moving their entire operation to the State, it is likely that the larger companies would find it more practical to initiate branch operations in Maine.

PHARMACEUTICALS Can Influence the Growth of Chemical Type Activity in Maine

One of the areas in the broad field of chemistry that is expected to do extremely well in this decade is the pharmaceutical or drug

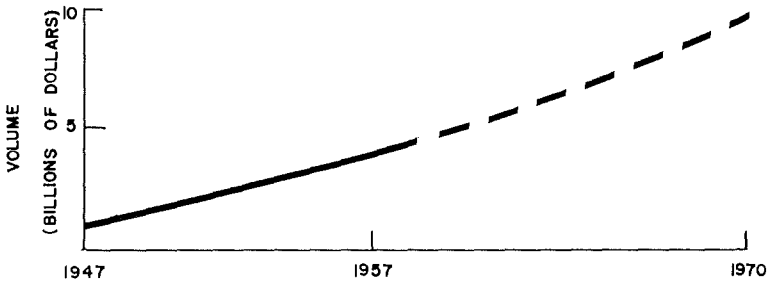
industry. Research outlays have been particularly lavish and should prove fruitful with a host of new product introductions in the sixties.

The activities of the pharmaceutical industry fall into three major areas: research and development of new drugs, production of medicinal chemical constituents, and formulation of constituents into prescribed dosage forms. While a number of firms in the industry specialize in only one of the activities, the majority of companies perform all of these operations.

Pharmaceuticals Will Grow 100%; The Industry is Heavily Oriented to the Northeast

Vast expansion of the pharmaceutical industry has occurred in the last decade. In 1947, the volume of the industry was \$1.2 billion, in 1957 it was \$3.7 billion, an increase exceeding 300% in the ten year period. For the sixties, the drug industry is expected

PHARMACEUTICAL VOLUME



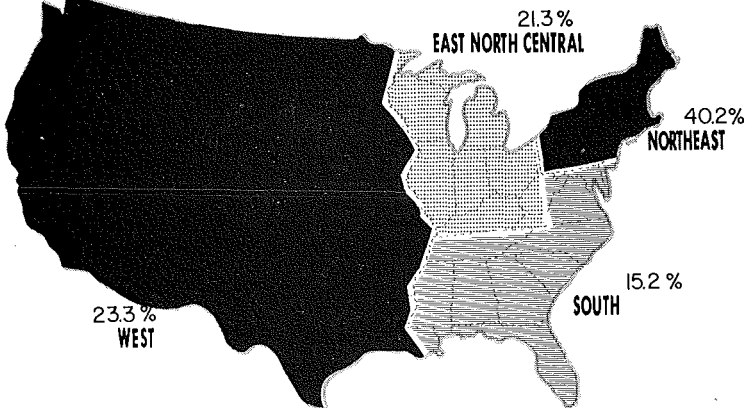
to double its present volume by 1970. Most product types within the industry, as listed below, will be instrumental in the anticipated growth:

- | | | |
|-------------------|-------------------------|-------------------------|
| Proprieties | Antibiotics | Vitamins and Hematinics |
| Tranquilizers and | Hypertensives | Hormones |
| Biologicals | Hypnotics and Sedatives | |

Geographically, the major volume of the pharmaceuticals are produced presently in the Northeast and in the East North Central regions of the United States as shown in the following chart.

A large number of firms, over 1,100, are currently in the industry ; less than 1% of the firms had 80% of the industry sales. Thus, over 1,000 "small" firms exist in the industry.

PHARMACEUTICAL PRODUCTION



Maine Can Offer the Industry Low Cost Operation Plus Close Proximity to Research Activity

Maine can readily satisfy the two most common requirements of the pharmaceutical industry: available labor and fresh water. In addition, production of drug products in Maine would present an operating cost advantage through lower labor investment which would be little affected by transportation since drugs, once again, fall into the category of high-value, low weight.

Maine has an advantage over other regions of the country in being closely situated to the vast research network in the Northeast devoted to medicine. Producers in Maine could readily participate in new development programs. Such a proximity coupled with the availability of land, water, and labor force, should be inviting to firms in this industry.

PRODUCTS FROM THE SEA Offer a New Area of Exploitation

One of the newest frontiers to challenge man is the sea. Here lies a virtually untapped potential multi-billion dollar opportunity. Several areas in which recent developments portend large future in-

dustrial growth are discussed in the following paragraphs. Maine's large sea coast provides an excellent opportunity for "getting in on the ground floor" and serious consideration should be focussed upon this possibility.

The Sea Can Give Many New Kinds of Industry

The future of the sea, in being new and challenging, can offer many opportunities. Some of the potentials that exist for this "industry" are the following:

Submarine Travel . . . Recent explorations beneath the polar ice cap by nuclear submarines have indicated that commercial trade routes are possible. Utilizing the route below the ice cap, the distance between England and Japan is 5,000 miles shorter than present routes. By utilizing submarine "freight trains", a new era in transportation may be on the horizon.

Mineral Extraction . . . At present, magnesium and bromine are secured from sea water; sulphur and oil are procured from ocean floor probes. Present research in this area is expected to increase vastly the minerals which can be extracted economically from the sea.

Food Supply . . . As the world population increases, the sea may offer a lucrative source of edible flora and fauna. For centuries the Japanese have harvested algae from the sea for food: these algae are rich in vitamins and minerals. Plankton, tiny floating or drifting creatures of the sea, may be used as fodder for domestic animals.

Seaweed . . . Here arises what might be considered one of the most interesting of all possibilities. Presently, seaweed is considered an important additive of fodder and fertilizer. Kelp meal is being used in the diets of mink and chicken with interesting results . . . the mink develop shinier coats, the chickens lay larger eggs. Algin, another seaweed derivative, is replacing gelatin as a stabilizer in ice cream.

Seaweed also offers possibilities in application to other products such as antibiotics and sausage casing. It has been used successfully as a soil conditioner which has increased the productivity of the land.

Scientists have found that fish tend to collect around certain types of seaweed, thus they have been led to speculate on the possibility of raising fish in cultivated areas of the ocean. A "fish farm" might prove feasible in the future.

New developments are appearing each day, and new doors are being opened. The sea industry is still in its infancy — and while some commercial products are feasible today, there remains little doubt but that it will expand tremendously in the future.

Maine Should Look to Three Areas for Exploiting This Potential of the Sea:

Oceanographic Research

Sea Products

Equipment Fabrication

Basic to the future commercial growth of sea industries is current sea research. While both the U. S. government and private concerns are interested in ocean exploration, the facilities established to date are quite meager. Thus, there is a good opportunity for Maine to get in on the ground floor, and exert concerted effort to become a leader in oceanographic research.

Maine is also in an excellent position to develop commercial sea products. With its extensive coastal area and its favorable business and living conditions, the State has much to offer potential concerns in this field.

In addition to research and products, a vast market should open to the area of equipment fabrication. Both research equipment such as instrumentation, special ships, etc., and commercial equipment needed to harvest sea products will be required. Additionally, the expansion of the fleet of nuclear powered submarines and other vessels in the course of the next two decades offer Maine manufacturers the opportunity to do subcontract work for the prime contractors of these sea defense products.

Maine, in summary, should encourage both private concerns and government agencies to establish research centers in oceanography in the State. Also, it would be of advantage to "get in on the ground floor" by encouraging firms knowledgeable in commercial ocean products to expand their operations in Maine into some of the feasible new products that can be extracted from the sea.



RECREATION AND TOURISM Offer Good Growth Possibilities for Maine

With the decided trend toward an increase in discretionary income and increased leisure time, has come more emphasis on recreation and vacations. Maine, being close to the dense population areas of the east, should regard this trend as one which can result in significant economic activity for the State in the future.

Maine's natural attributes makes it ideal for vacation and recreation. To attract vacationists is predominantly a matter of providing suitable recreation and tourist facilities. Facilities in parks, camp sites, beaches, and other types of recreational activities should be thoroughly studied and where necessary, expanded; these must be provided before an extensive increase in tourism and recreation can be expected. Maine, in addition, should also encourage the development of more tourist accommodations — new motels are sorely needed. To make such investments economically feasible, an opportunity may exist to extend the normal vacation season by providing for fall and winter sports activities. It may also be feasible to consider the possibility of year round vacation sports resorts. In any event, Maine can take advantage of the increased trends in recreation and vacationing, but it must gear itself to the needs of these guests.

Since a preliminary study of Maine's recreation industry is being conducted by the University of Maine, recreation has not been dealt with directly in this project. The potential importance of this economic activity to Maine is of such significance and possible impact that its role must be recognized in this review of economic growth areas. After the preliminary statistical information on the inventory of the recreation facilities in Maine has been compiled, the next step required is an analysis of the specific needs and desires of the tourists and vacationists who look to Maine for recreation. Once these needs have been identified, it will be a matter of taking corrective action — as identified in the analysis — to provide these features within the State.

It should be recognized that the recreation-tourism area does offer excellent promise for growth and should be considered as one of the foremost economic potentials for Maine.

Expansion in Service Activities Will Follow Industrial and Commercial Growth

An important point to note is that as industrial and commercial activity and population increase, the demand for services such as utilities, medical care, lawyers, police, public works, and so on increases. Most of these services are directly related to increases in the population; where the population is growing, doctors are needed to provide adequate medical care, a more extensive public works program is required, additional police and fire facilities must be furnished, and so forth.

In some cases the trends in the increased consumption of certain areas and services will also provide the impetus for expansion of services. By 1970, for example, electrical power usage in the average home is expected to increase 5 times over present levels; this alone will require a sizeable increase in electrical utility output. The increased use of the automobile, as another example, results in additional requirements in repairs and in related services.

In general, therefore, the expansion in the service area will depend primarily upon the growth in other industrial activities and in the population; it will be necessary to achieve these others first. To significantly increase service functions before the demand for them is established, would be pointless. Thus, while increased activity in this area is recognized, it has not been considered as an area requiring major attention in this report.

This chapter has presented a description of some industry and economic activities that appear particularly suited for Maine and can offer growth potential in the future.

Again, it is emphasized that many opportunities exist . . . capable entrepreneurial ability and adequate financing could well blossom many of those dormant areas for Maine in the future. The industries here discussed are not presented as being all inclusive. They merely provide a starting point where the chances of establishing new industry appear most favorable at the present time.

Chapter Five

CONCLUSIONS AND RECOMMENDATIONS

Growth is generally expected in the future. In New England, the relative advancement of the various states will be determined by the degree to which states are successful in stimulating industrial and economic activity within their boundaries. Those states which aggressively promote themselves stand to gain the most, both in absolute growth and in relation to their neighbors.

In general, three basic objectives should govern general economic development in Maine:

Expand present industry

Encourage the formation of new industry

Bring new economic activities to the state

Each of these three areas are important in the broad program to increase the economic activity. Each covers a specific part of the total approach necessary to progressively expand activities within the State.

To encourage economic growth, the State of Maine and its local communities must make themselves attractive to those economic activities, industry, tourism, or others, that they wish to have flourish. These activities are more likely to become established where the business climate is compatible to their need.

A broad program encompassing both long range as well as more immediate goals must be formulated to give direction to the activities of various groups within the State. Such planning will also permit the State to structure the assets it will have to offer for industrial development in the future.

To attain the desired results, planning must be implemented by aggressive enthusiasm on the part of the leaders in the State. Economic development takes time, in some cases years; staunch determination is necessary to achieve the goals and to motivate others in their attainment. Strong, optimistic, aggressive, and determined leadership is required to accomplish the program of economic development.

Within this final chapter of the report are presented basic observations and conclusions of the study team which transcend any specific aspects of the study. These observations are concerned with over-all state-wide opportunities for improvement; they are exceedingly important to Maine's future development. In addition, a specific set of all encompassing recommendations and a definitive plan of action designed to achieve the State's objectives of economic development is presented.

Maine Has Many Good Features and Assets that Indicate Economic Growth Can Be Achieved

An integrated review of Maine's economic, social, political, cultural, and geographical position leads to the conclusion that it has many assets that can be developed further. However, it is not, so to speak, a "diamond in the rough". It would be unrealistic to assume that within the immediate future Maine would become a completely and highly industrialized, high density, economic area of living, nor should one assume that this is a desirable objective. But it is very reasonable to expect, that with a persistent effort, the existing assets of Maine, its government, and its people can be directed to materially increase its economic position in the national economy. What is required in many instances is a lot of hard work and application and, perhaps more importantly, a change in the attitude and thinking of its people regarding Maine's future and potential.

There are a number of basic problems which transcend the State at large and tend to limit its growth. These problem areas, or viewed more positively, "improvement opportunities", are discussed immediately below and are followed by a recommended program of action.

Six Basic Areas Offer Good Opportunity for Improvement

The State of Maine encompasses a large geographic area. There are variances between communities in economic activity, in social and cultural outlook. However, for the most part, the study team observed six general situations which appear to offer universal opportunity for improvement; these are reviewed in the following discussion.

To present the impressions of the study team in its clearest light embodying all implications, part of the following is presented in the first person narrative.

Probably the Most Important Improvement Opportunity is the Conversion of the General Lethargy of Many of the People of Maine to a Dynamic Outlook

Throughout the interviews and travels of the study team in the State of Maine, we found a surprisingly large number of Mainers who appeared to be convinced that the State was doomed toward economic failure. There was hope in many people, but it seemed to be overshadowed by a rationalization that the outlook was dim.

This situation stems, we believe, from two major sources. First and foremost, is the fact that the State has been dealt a severe economic blow as has the entire New England area with the departure of the textile industries to the South. Secondly, the general history of the State, which has been somewhat less dynamic than that of its neighbors, seems to compound this general impression and feeling.

In reality, there is little justifiable cause for such an outlook. Maine has many assets among its people, among its operations, among its natural resources which, if properly directed and channeled, can expand existing economic activity and can attract those particular industries which could and should be located in Maine for over-all economic gain.

General Non-Aggressiveness of Management in Many Concerns

The general outlook of Maine's people transcends into its managerial and entrepreneurial ranks. Time and again, the study team was surprised to find that many managements and corporate operations in the State of Maine have attained a very strong and active growth but only up to a point. Quite frequently, at a point where substantial further growth could be achieved, it appears that active efforts were taken to curtail or to forestall this growth. Very often private ownership, achieving a given level of financial security and community respect, evidences no desire to improve its position. The general concept of what was good enough in the past is good enough for me seems to prevail in these cases. There

is apparently little motivation for introducing new equipment and new facilities to expand ownership and market penetration. We do not wish to suggest that there is an inherent obligation for each Mainer to work beyond his personal desires — but wish only to point out that the Maine “level of satisfaction” appears to be considerably below that of other growing and prosperous states.

Exceptions exist. In many cases the study team found examples of very aggressive and active managements and companies. These groups are looking to the future and planning for expansion and growth. However, the predominance of non-aggressive management and concerns brings the study team to the conclusion mentioned above.

Where the Spirit Exists — Information and Direction May be Lacking

We wish to re-emphasize — the above observations certainly are not all inclusive as far as the State is concerned; there are many notable exceptions both on a community level, on an individual level and on an industry level. However, it is also our impression that even in those places where keen spirit exists for improving current situations, attracting new industry, and the like, there is little realistic information available regarding how these ends might best be achieved. Even worse, the leadership itself is very often not continuous and does not have specific experience in these areas of economic growth and development.

Various Other Important Factors Such as Education, Research, and the Development of Opportunities for Young People, Offer Excellent Potential for Self-Improvement

As might be summarized from the above observations, the State of Maine in large part goes on today as it has in the last fifty years. Again, there are many notable exceptions of far-sighted planning, progress and development. Certainly the large proportion of Maine's cities which have undertaken city planning programs is indicative of this point. But by and large, Maine appears to be content to remain “second best” in such important areas as over-all higher educational facilities for its young people, provision for vocational training and support of various research activities. These types of activities are the forerunners of future economic and technical development. As a consequence, it appears

that more and more younger people are leaving the State to seek economic opportunity elsewhere even though there is a strong social and cultural tie to the State.

Cooperation Between Various Economic Units in the State Might be Improved

The old Yankee tradition of individualism persists very strongly in the State, possibly to the detriment of over-all economic growth and development. It has been our observation that in those community organizations where a capable leadership and development effort exists, there may be a lack of cooperation with sister communities and regional areas of common interest. In fact, competition in some instances has been so severe between neighboring communities recently that it served to the detriment of the over-all regional area. In many cases, new larger types of industry would require a large pool of labor from which to draw manpower requirements. These would undoubtedly be secured from many surrounding communities since one community in itself would not have all the manpower and talent required by the industry. Thus, cooperation among communities is definitely warranted.

Communication Between the DED and the Local Development Groups can be Improved

In many instances it appears that there is both a lack of communication and understanding between local communities, their development groups, and the Department of Economic Development at the State level. In part, this misunderstanding stems, we believe, from the previous history of the Department of Economic Development. It must be corrected.

At the present time, it is the general consensus in the State, that the Department of Economic Development is charged solely with identifying and locating all leading prospects in the State. This in fact, is not the case, nor should it be. The Department of Economic Development can and should act only in a staff capacity—helping out, consulting with, and adding some integrated direction to local community activities. It cannot, as is commonly believed, act for the communities. To function effectively in this matter, it must step up its program of conversing with, meeting with, and dealing with local representation in identifying and attracting new economic activity.

Major Conclusion: Definitive Steps Can and Should be Taken at the State, the Community, and the Individual Level to Counteract All Drawbacks

The problems currently facing the State are not insoluble. In large part they are man made, man created. Consequently, they can be changed and effort redirected along more profitable lines. Presented below in detail are a series of recommendations regarding specific programs which might be undertaken at various levels and by various groups within the State to achieve the State's over-all objectives. The recommendations are presented in three segments: the first covers a general state-wide program, outlining activities which should be executed on an integrated basis by Maine's people, by its communities, and by its various industrial interests. Next, a program is presented for action at the State level — thinking in terms of the DED, the legislative body, and the various administrative and control groups. Thirdly, a program that can be developed on a local level to gain greater attraction for industry is outlined.

Immediate Over-All Program—All Means of Communication Should Be Employed to Accurately Portray Maine's Economic Potential

The major objective to be achieved on a state-wide basis is to have the people of Maine become aware of Maine's over-all economic potential and of its opportunity for growth. In addition, leaders in various capacities in Maine's organized groups, in management personnel, in labor, and in government, should be cognizant of specific opportunities and strive to encourage long-range planning and expansion. A number of specific steps are suggested below to achieve the goal of State-wide recognition of Maine's assets and potential.

Wide Distribution Should be Made of the Information in This Report

As a first step, we suggest and recommend fairly wide distribution of a modified version of this report. This will serve to introduce to various groups in the State what we believe to be an objective appraisal of conditions as they exist today and how they might be in the future.

The Communications Industry can Serve to Disseminate Factual Information on Maine's Potential

Concurrently, the facilities, interests, and capabilities of the State's communication industry, its newspapers, radio and television stations should be drawn into focus on gaining still wider divergence of this information to Maine's population. If compatible with economic cost and over-all general operating policy, we would like to recommend or suggest that portions of the over-all report be presented to the public at large in a series of articles in each of the leading newspapers, local magazines, trade journals, and various other publications in the State. This should also be augmented by a series of discussions and presentations on the radio and on local television stations.

The study team, in the course of its work in the State of Maine, has encountered outstanding cooperation from the State's communication industry. We are very optimistic that this group will continue in the spirit of this endeavor and that a continuing program might in fact, be adapted.

Various Group Meetings Should be Held Throughout the State

The Department of Economic Development, heads of various state departments, members of the state legislature, and the governor's office, might well undertake to initiate, coordinate, and provide the steam behind a series of "educational" group meetings throughout the State and also outside of the State. At such meetings, the emphasis should be placed on two points: (1) Maine has a good future potential, but (2) a good deal of hard work and progressive thinking is necessary. It would be desirable to disseminate this information in as many ways as possible. Talks could be given at various town meetings and at local group meetings such as women's clubs, the Rotary, P.T.A., and others. Possibly, members of the clergy could engender enthusiasm for the meeting by means of a brief introductory discussion at the conclusion of church services. Chambers of Commerce could meet for the specific purpose of reviewing the report and directing the general findings of the study to their specific local problems and opportunities. In general, all conceivable avenues should be utilized to sell the people of Maine on the State itself.

It might be well also for the Department of Economic Development to address itself to various industrial groups within the

State for a general state-wide conference and exchange of opinion, starting with the banking industry, the shoe industry, the textile industry, food processors and others.

The Word of Caution: A Continuing Program is Needed to Achieve Effective Results

Too frequently in community economic development programs an initial burst of enthusiasm is followed by despair and disinterest if tangible success is not immediately forthcoming. In fact, economic development is not a one shot activity . . . it requires continuous hard work. Therefore, it is extremely important that the above educational program be continuous in nature, constantly reviewing and reminding the citizens of Maine's potential.

THE STATE PROGRAM

The Program for Economic Growth at the State Level

At the executive and administrative levels of the State a number of things can be done to further the activities of local government and the State at large toward economic growth. These center primarily around programs that affect industry, taxes, legislation, financing, and are keyed to developing an attractive place in which to live and work. This section presents various points for consideration at the State level and outlines a suggested plan for the Department of Economic Development. It is recognized that several of the points and programs listed below are already underway to some degree. They are presented here to stress their importance and to possibly suggest a complementary approach to the same end.

The State Should do All in Its Power to Enhance Livability and the Business Climate in Maine

To attract new industry and additional economic activities, very often certain sacrifices must be made to satisfy the requirements of industry. These sacrifices may entail financial, esthetic, and personal considerations depending on the circumstances. It is exceedingly important that this fact of life be recognized in the formulation of legislative and executive economic development policy and programs.

One of the important criterion employed by industry at the present time in selecting sites for plants, warehouses, and research facilities, is the general livability of the area being considered. To this end we would recommend that the legislature, wherever feasible within the financial capability of the State, direct favorable attention to local projects designed to improve schools, hospitals, various civic operations and transportation systems in terms of highways, roads, airports, and other means of transportation.

By the same token, some industries cast a searching eye upon the general business laws and tax structure of states when looking for their new outlets. It is important that very definite laws be enacted which would tend to attract industry and provide industry with an indication of Maine's general receptivity to industry.

Research activities must be expanded

One of the long range goals should be to increase research activities: industry in the future will be more technically oriented than it has been in the past. If Maine is to share in the growth of industries, it must equip itself to serve industry by providing features and services that industry will require in its development. This center could be active in theoretical as well as applied research for the various industries situated in the State. For the larger industry in Maine, a separate research facility could likely be formed; for the smaller industry, a jointly sponsored research center might be more appropriate.

Educational programs should be directed toward increasing the skills of Maine's youth

Educational programs must be designed to teach higher skills. Trends in industry point to the growing need for more technicians and specialists who are well versed in modern technology. With increased attention being devoted to automation and the general use of precision equipment, it is to the advantage of the younger generation to become knowledgeable in such skills both from an operating standpoint as a trade and from the developmental side as a profession. With the demands of a growing population will come greater need for more scientists, doc-

tors, engineers, businessmen, and on through other areas of professional activity. The educational system in Maine must plan to expand education in these higher skills in the imminent future if Maine is to contribute to the educational requirements of this generation.

Long range zoning plans are needed

Effective zoning will help to induce industry. The congestion that exists in some of the Southern New England states points up dramatically the scarcity of land. Maine is in a favorable position to look forward to the utilization of its lands and to plan ahead. Industry, in looking for new sites, is aware of the significance of the plant's surroundings and of the facilities for employee housing and recreation. Neither industry nor residential communities desire to mix together haphazardly. It is recognized that many communities in the State have done a commendable job in their zoning programs. These groups should look forward to even more extensive programs which could assure industry of suitable location and of desirable housing and recreation sites for employees. Adequate provision for housing is particularly important where workers must be attracted to the State, as undoubtedly will be necessary if Maine expects to bring in new industry.

Tax philosophy must be defined; future tax programs must be planned

Tax programs must be geared to permit industry to flourish while providing for the necessary services they require. Although increasing taxes is frowned upon, consideration should be given to the fact that it might prove more advantageous in the long run to have sufficient revenue available to provide those facilities and services which industry needs to help it flourish. In any tax program the anticipated benefits to be derived from the use of the funds must be weighed against the added burden that it places on the industry and on the residents of the State.

The Department of Economic Development Should Make Every Effort to Guide Internal and External Economic Development Activities of Maine — Rather Than Undertake Them

It is the candid opinion of the study team that Maine's Depart-

ment of Economic Development is doing a wholly creditable job in attempting to expand existing industry and in attracting new activity to the State. In fact, it may be said that the Department has possibly cut out too big a task for itself to handle on a realistic basis within its budgetary and size limitations. As has been mentioned previously, in many instances the Department of Economic Development attempts to function as a direct agent in locating, attracting, financing, and aiding new industry in the State. From a realistic standpoint, it might better act in a staff capacity in this regard.

To this end, the existing efforts and funds available to the Department of Economic Development, possibly with moderate extension, might be regrouped and remmarshaled into functions that would be somewhat more effective. The general areas the Department may well emphasize are outlined below and are followed by a discussion of possible modifications that may be considered by each of the Department's divisions. At the conclusion of the discussion, the study team presents its impressions with respect to the desirability of expanding the budget of the Department of Economic Development.

In its activities, DED must plan for the important functions of :

Economic expansion

Community development

Information disseminations

Economic Expansion — DED should assist present industry in expansion programs; in this function, DED can act as representative of and consultant to smaller industries in their formative stages. DED can assist the larger corporations in various State industry problems and in expansion planning.

Various programs can be developed which would encourage expansion into new markets and products. Some devices to expand industry are :

- 1) Exhibits of business opportunities
- 2) New products, new methods, and patents exhibits
- 3) Industry group meetings

The State's economic development program must also be promoted; creating interest in the State is one of the most important functions of DED. In addition to developing and disseminating promotional literature, a major part of this function should be achieved through contacts — both personal and especially through **group meetings**.

Field calls on prospective industry should be continued. These calls should be based on leads which can be developed from such sources as: requests for information from various concerns, businessmen, financial institutions, realtors, representatives of utilities and trade associations, and others.

Promotional literature should be designed to introduce the recipient to the State, its people, its facilities, and its assets. A good professional job in promotional pieces is necessary to effect favorable reception. This material should be distributed to prospects and to various groups active in plant location such as realtors, real estate departments of various concerns, etc.

Other promotional activities could include:

State-wide promotional tours for industry representatives

“Flying Squadron” — Teams of community leaders sent on promotional tours outside the State

Talks at conferences, seminars and meetings of various industry and professional groups outside the State

Community Development — One of the important ways in which the State can attract new activities is to have a strong body of well organized community development groups throughout the State. DED should be the planning force and the guiding light in this important activity.

DED should perform the following functions in building strong community groups:

- 1) Guide the organization of the group
- 2) Assist in selecting strong leaders
- 3) Provide training in functions and techniques
- 4) Encourage regional groups

- 5) Hold periodic conferences (preferably every three months)
- 6) Publish a brochure specifically on area development information

A State-wide training program for community groups which would cover the following topics in economic development is suggested:

- The functions of area development
- Making the community attractive to industry
- Techniques of developing and contacting prospects
- The design of promotional material
- Techniques in personal contact

Information Dissemination — DED should act as an information center to industry and communities. For those expressing interest in the State and desiring regional or community information, DED should have available fact sheets and other appropriate information to furnish them. Communities should be encouraged to provide this material to DED as well as to the Office of Area Development of the U. S. Department of Commerce, Washington, D. C.

The DED should also maintain current information on Federal programs involving financial and technical assistance to communities. Reference to such available material can be made in a proposed newsletter to community development groups.

The Industrial Division may wish to concentrate upon acting as a staff organization rather than a line activity

Possibly the greatest emphasis in terms of a conversion of philosophy and impression of DED'S operations from line to staff can be achieved within the Industrial Division. In the past, there have been few, if any, effective local development groups within the State. It is the opinion of the study team that at this time there is enough basic capability at local levels so that a transition of responsibility from the State to local community is mandatory in the long term planning of economic development.

This transition can be achieved in several ways: initially, by concentrating further upon visits with local communities and

encouraging local citizens and businessmen to participate more effectively and extensively in economic activities. Additionally, this can formalize to a series of monthly or bimonthly meetings in various geographic areas wherein such subjects as the art of industrial development, the need for geographic cooperation, and like factors might be considered.

An extremely important element in this phase of the Department of Economic Development's activity, and all of its activities, is the solicitation and active use of the leading businessmen within the community to call upon, identify, and deal with directly various new business prospects. The president of a company can achieve a rapport and a discussion base which would be extremely difficult for a State representative to achieve.

It is the opinion of the study team that the recent merger of "in" and "out" of state activity within the Industrial Division is an extremely progressive step forward. Economic development cannot be an in and out of state function. It is an integrated function which requires all of the assets of the State to be pooled for successful achievement. The merger of in and out of state activities allows for the transition of activity to a local level. To further this transition, it might be well to conduct industry-wide seminars within the State so as to improve cooperation among industries to allow for a better exchange of information and to pool over-all assets and abilities.

It is the study team's impression that the Department of Economic Development has been outstanding in its relationships in work with the Society of Industrial Realtors. However, we believe that **possibly** too much emphasis is placed upon this activity. There is no substitute for direct selling; it requires constant effort and application. Consequently, we believe that a possible transfer of effort and dollars from the outside solicitation of the SIR to the expansion of the department's internal activities related to local industrial development throughout the State might well be worthwhile.

Industrial development is an extremely nebulous type of activity. It is never easy to identify how or where various successes came from. But nonetheless, it is extremely important to budget activity and effort if greater success is to be gained. To this end, it is suggested that a continuing tally be maintained,

to the extent possible, to identify those activities which have been most successful in expanding existing industry and in attracting additional industry. By this mechanism it will be possible to relate the cost of each activity to its potential benefits and thus evolve an optimum program.

The activities of the Recreational Division might well be expanded

It is the study team's opinion that the current recreation promotion program of the DED is outstanding for the budget available for this activity. We believe, however, that the current budget is quite restrictive in fashioning a widespread aggressive advertising campaign. This is an area in DED's operation where we would very strongly recommend an extension of funds. These funds should be applied or used in two ways: number one, to carry out an integrated study to define those appeals and approaches which should be employed in attracting outside recreational funds and people. To do this, we believe it is necessary to conduct an integrated study of vacationing trends, population mobility, disposable income, city requirements, and desires of the vacationer. Once these demands or potential are defined, they can be employed to fashion effective advertising themes and campaigns. Secondly, a sheer step-up in the intensity of promotional dollars spent, might well be employed to attract greater outside income to the State.

The Publicity Division may wish to re-distribute some effort from in-state to out-of-state activities

Presently the Publicity Division's activity is devoted largely to educating and advising the people of Maine of the activity of the DED, other State divisions, and of the over-all general economic development. As indicated previously, this is an important need and should be continually serviced. We feel, however, that various marginal announcements and activities in this area might better be directed to expanding the leadership of Maine's activities to industrialists, businessmen, tourists, and vacationers who reside out of the State. This would serve to broaden the base for Maine's economic growth.

The Geology Division should submit an over-all long term geographic exploration plan to government

Presently only about 10% to 15% of the geographic area of

the State of Maine is well mapped. Approximately three-fourths of the State's surface is not explored. On the basis, however, of various out-crops of minerals and formations within the Canadian provinces which adjoin the State, there is good geologic reason to expect that similar minerals may be found within the borders of the State itself. To this extent, we would recommend that a long term program of action be submitted by the Geology Division to the State legislature for expanding current knowledge of the State's mineral potential. If for no other reason, this kind of activity is necessary to disprove the general "wilder-ness" concept that now surrounds the State. The suggested program by the Geology Division might well specify time, goals, and total dollar requirements.

In addition, the fine work of the Division of compiling all available statistical information as it now exists and working with industry and large land holders in further developing such information should be carried on at an accentuated pace. The establishment of working relationships with current potential mining companies is also a highly desirable activity.

The Research and Planning Division might consider studies in those areas identified as major economic problems in the course of this study

The Research and Planning Division currently conducts a wide variety of general and specific studies for communities throughout the State. These studies are important and have been an extremely successful means of improving the over-all economy of the State. It is believed, however, that for the immediate future the energies of the Research and Planning Division might be better channeled to considering specific major problems uncovered within the study. These possible research programs are listed below.

Transportation Study — It has been noted in the various economic analyses of the existing industries of the State and of new potential industries which might locate in the State that the cost of transportation of raw or finished materials by existing facilities is high in relation to the competitive South and Midwest. Consequently, an integrated analysis of the State's rail, air, truck, bus, and marine transportation might well be undertaken to define the over-all capability of

the State, its economic position, and steps which might be taken to place its facilities at a more competitive position.

Extension of the Recreational Study — The University of Maine is presently conducting a study designed to “inventory” the recreational assets and activities of the State. It is suggested that an integrated study of vacation trends which can be used as an input to Maine’s recreational promotion activities be conducted under the auspices of the Research and Planning Division. These results can then be employed to evaluate the adequacy of Maine’s current facilities and formulate effective plans for corrective action.

Training of Labor — The State is hampered in many respects by the lack of skilled labor. The Research and Planning Division might well consider a study to determine the optimum means for correcting this situation — utilizing the best combination of vocational schooling, industry and union training, and other techniques.

Comprehensive Review Study — It is suggested that a review of the progress made since the issuance of this report be made in two years. Economic development is a dynamic activity and conditions must be constantly re-assessed to gauge progress and possibly redirect effort.

It is the opinion of the study team that the above studies might be conducted by personnel within the Research and Planning Division and/or with the help of outside counsel. To this end, it is suggested that an uncommitted annual research fund, initially in the amount of \$50,000-\$75,000 be made available to the research and planning committee for the utilization in specific studies as the need requires.

On an over-all basis, the Department of Economic Development should continue present steps to increase its effectiveness

On a department level, there are a number of things which might be considered for improving over-all effectiveness and efficiency.

The first is a continued presentation to the legislature and to the public at large, of the importance of the role of economic development for future growth of the State. An extremely im-

portant facet of this fact is that industrial development like most activities in the United States, is becoming extremely competitive. Therefore, it requires an adequate budget, and it must be staffed by competent, well trained personnel. To this end it may be desirable to have the present salary structure of the DED reviewed by the appropriate State agency so as to allow the Commissioner the ability to retain and attract effective personnel.

A "Citizens Action Committee" should be established. The purpose of the Action Committee will be to expand economic development activities and to assist in promoting Maine. This Committee should be spearheaded by the Department of Economic Development, and it should be comprised of leaders in various areas: industry, business, education, and finance, among others. Preferably the Committee should have between 15 and 20 members, and could well include representatives from women's organizations. The Committee should participate in planning and in promotional programs. In effect, it can be considered an extension of DED.

To achieve a greater over-all integration of local communities in economic development activities, it is recommended that two regional offices be established by the DED — one being located in Portland and one in Bangor. The physical location of the branch offices, remote from Augusta, will allow for a greater ease and facility in visiting local representatives of areas and in dealing closely and continually with their problems.

In addition to the various duties now being conducted by the DED, it is suggested that this group be assigned a function of reviewing and suggesting legislation which might be employed in the attraction and expansion of economic activity. The DED is in a good position to be sensitive to the trends and demands of industry at large. If industry and other business activities are to flourish, legislation must encourage them. As a specialist in business activities, the DED is in a favorable position to advise legislatures of the impact of various laws on industrial activities. It can review current legislation and can call attention to the legislation that has been effective in other states. In this way, the DED can serve legislators in important business legislation as well as promoting economic growth in new as well as in present industries.

The last point in observation is that the DED must continue to expand its current activities in fashioning a State-wide, long term economic plan. This study serves but as a base for such activity. It is necessary to continually revise and up-date conclusions, observations, and plans of actions based upon the moves of competing states and on over-all national and geographical trends.

If funds are available, it is recommended that the budget of the DED be extended to approximately \$1,000,000 per year

The study team recognizes that there are many demands placed upon a state government. There is competition for funds and efforts among economic development, policing, sanitation, and other activities. If at all available, it is strongly suggested that the budget of the DED be increased to approximately \$1,000,000 per year for it is economic development that eventually provides sufficient State income to support better other State functions.

It is important to note that this figure was developed in terms of an appreciation of the job which has to be done and the estimated costs thereof, rather than upon any apportionment of funds on a per capita or per square mile basis. As earlier cited, the State of Maine possesses a good potential for economic improvement. However, in fact, it has followed its neighboring states in capitalizing upon its potential. It is necessary to initiate a full fledged concentrated program in this direction.

THE COMMUNITY PROGRAM

Community Cooperation Is Essential to Success

While the State can initiate and promote economic development, the communities and the people themselves must be receptive to a new economic activity. Only they can establish a local business climate and control local conditions which will be attractive to industry. Thus, communities should endeavor to expand their development activities and to formulate a long range program for economic expansion. In numerous ways, state and federal agencies concerned with this subject can be of assistance in establishing the program and in indicating its direction, but it falls upon the communities themselves to carry it out.

It is exceedingly important that the activities of the existing individual community development groups be better directed to their own ends and better integrated among sister communities and economic areas. To do this we have recommended a series of group meetings wherein representatives of the Department of Economic Development at the State level, meet with local people at a give and take exchange basis to learn how available resources might best be marshaled for a common cause and objective. It is often surprising to find how many differences can be resolved simply by the process of getting them out in the open and agreeing to disagree or to agree or to compromise.

In this section of the report are a number of suggestions which are applicable to community development activities.

Strong Leaders Must be Selected

In setting out to raise the economic activity level in the State, a firm foundation in community development groups must be built. And to fashion these groups, capable people are needed — especially strong leaders. Thus, one of the first requirements to this program is to select leaders who are vitally interested in development activities and who will be aggressive in the pursuit of them.

The Communities, in Establishing Their Program, Should Consider a Regional Grouping for Promotion and Planning Purposes

Too frequently, a small individual community has found the cost of supporting a development agency (the manpower requirements, the promotional expenses) to be prohibitive. In Maine it was found, in the course of the project, that numerous communities were at a disadvantage solely because they could not afford either a capable or full time professional development staff, and the attendant expenditures necessary for proper promotional activities. In numerous cases it was also found that the smaller communities tended to figuratively fight one another in trying to entice industry.

In view of the problems of the small communities, we would like to propose that they consider the possibility of cooperating with other small adjacent communities to form regional development

groups. Since community funds, to some extent, will be pooled in this regional development function, a more professional promotion effort can be attained and a more capable staff enlisted to perform this function.

This regional approach is in no way detrimental to the individual community's interest. Each community will still have the opportunity to present itself and its features and assets to companies interested in the region. Should, however, a company become established in an adjacent community, it is still likely to offer employment opportunities to the people in surrounding towns; thus, those communities within the region will still reap benefit from this promotional activity.

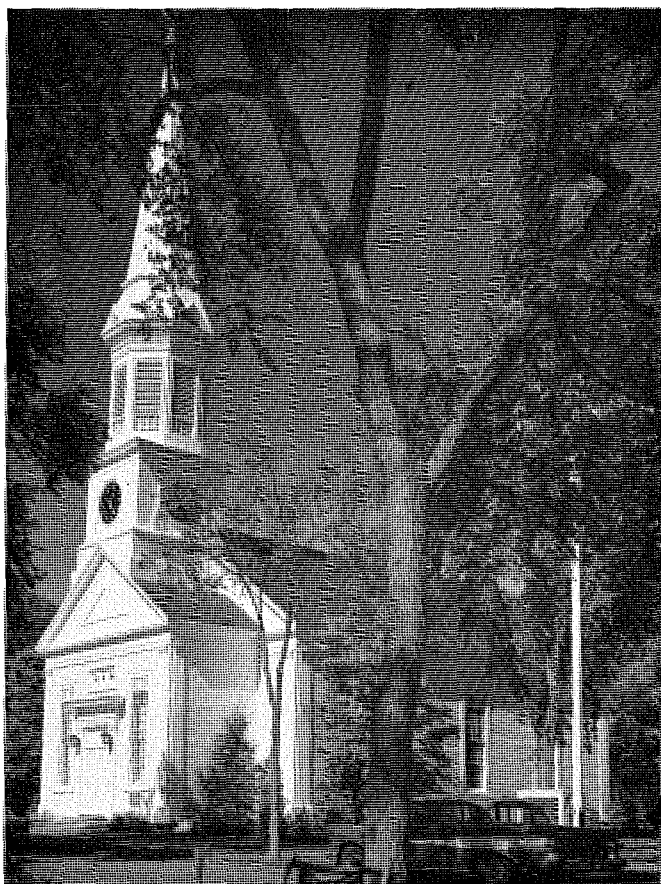
Communities must realize that one of the problems they face is the job of selling the economic activity or industry on locating in the State first of all, then on their own geographic area, and finally, locating within their own community. In a final sale or promotion of their own community, they are promoting their facilities, their receptivity to business, their business climate, and other specific features they have developed or are naturally endowed with. Thus, it behooves the communities to ban together to generate the initial interest in their geographic area within the State, and subsequently, to engender interest in their particular community area and its assets.

The Community Should Consider the Establishment of a Local Economic Development Commission to Supplement the Efforts of Its Development Department or Group

Various communities as well as larger cities in the State will probably find it advantageous to supplement their own economic development department with an advisory commission which can assist in economic development activities. The advantages of having a commission stem mainly from the guidance it can give economic development planning and the assistance and participation it can lend to the promotional activities of the community or the city itself. This local commission should be comprised of businessmen, government officials, and other influential persons in the community. The size of the commission may vary with the city or number of communities served, but preferably should be between 5 and 10 members, depending upon the degree of cooperation that can be expected and the size of the community.

A Local Program Should be Initiated to Make the Community Attractive to Industry

The first step to developing industry and increasing the economic activity within the area is to offer a pleasing business and community atmosphere and climate. The townspeople must decide on the extent to which they will go to encourage business activity in their midst. To attain a high degree of economic growth, it is necessary to adjust to new situations and be open minded in



accepting new techniques and developments. Should a particular industry or company find the community not receptive to its requirements it is likely to look elsewhere for location.

One of the basic things that the community can do to help attract new industry will be to make its appearance pleasant. The old adage that first impressions count most, can be applied to a prospective industrialist looking at the community. The general appearance of the residences, municipal buildings and parks, and present business establishments reflect the community.

The community is also likely to find that the availability of a long range zoning plan which would outline the industrial, residential, commercial, and recreational areas of the community to be a great help in attracting new industry. In numerous cases a new company is quite interested in learning about this plan, since it will be a factor in its own future growth and in attracting new employees to the area. The company must be able to show the employees that desirable areas for living and recreation exist within the region or community.

Community Promotional Activity Should Center Around Personal Contacts and the Distribution of Brochures

Without question, communities will have to direct their programs to those activities where they can expect to secure the largest return from the limited funds they have available for promotion. In many cases, this will mean that initial contact with potential prospects will have to be effected through references, expressed interest, or through promotional means such as direct mail.

The development group should initially make "fact sheets" and, if possible, a brochure describing the community, its facilities, and its advantages. Copies of this material should be distributed to the State Department of Economic Development, to the U. S. Department of Commerce, Office of Area Development, and to the various potential contacts. Another step to such publicity would be to consider the community development program of the Conway Publications in Atlanta, Georgia which publishes the "Industrial Development" magazine.

Finally, personal contact is required. This should be the main responsibility of the manager of the development group in the community and to a lesser degree, should also be engaged in by the development commission, and by other business and social leaders in the community.

The Community Should Encourage the Expansion of Present Industry as Well as the Formation of New Ones

Too frequently, programs for economic development are limited to searching for companies that can be brought into the community. Existing industry within the community should be encouraged to expand. New applications or products should be sought, markets should be extended. The community can assist in this type of program by having a few members of the development commission determine what kind of expansion is feasible and how the community could help the various concerns in such programs.

The possibility of starting a new industry within the community should also be considered. As a start, consideration could be given to the production in the community of products presently purchased elsewhere. One example of this type of situation is sub-contracted products on manufactured items (either in defense or private). Other product possibilities, perhaps some new products, might also be considered. Perhaps businessmen could pool their resources together and establish such a venture in the area.

In general, it is highly important that the community expend some effort in its own backyard before scouring the countryside looking for a new opportunity.

This chapter outlined some of the more basic concepts and activities which must receive the wholehearted support of the people and government of Maine if economic growth is to be achieved effectively. Some of the programs and activities outlined are now being carried out to various degrees. The purpose of this chapter is to present conceptually, in one place, an integrated appraisal of the conditions which must be achieved in expanding existing and in attracting new economic activity.

Credits

It is customary at the completion of a research program to acknowledge the contribution of those who have participated in the program.

In this case, the major acknowledgment must be made to the people of the State of Maine. Throughout the program, the members of the study team received the unequivocal cooperation of all who were contacted in the government, business, commerce and in the general public.

In addition to the general aid offered by Maine people, extremely valuable guidance and specific contributions were made by the State's Department of Economic Development. Commissioner Lloyd Allen, Mr. Sulo Tani, among many others on the study Steering Committee, contributed unselfishly of their time and effort; Mr. Tani, Director of Research and Planning, acted as project leader for the State of Maine in this program.

At the Armour Research Foundation, consultation was held with a wide number of specialists in each of nine research divisions. The primary control of the program resided with the Techno-Economics Research Division: Mr. Hawkins Stern was primarily responsible for the evaluation of Maine's assets and studied the potential of the food processing industry; Mr. Byron Wien analyzed the current situation and the outlook of the shoe and textile industries; Mr. Edward Andrie coordinated the over-all activities of the study and was responsible for the analysis of the paper and pulp and the woodworking industries, as well as identifying new economic activities suited for location in Maine.

The study team collaborated through all phases of the program and jointly formulated the recommended plan of action.

It has been a pleasure working with the people of Maine. We believe the findings of this report provide a basis for achieving substantial economic growth in the State.

Respectfully submitted,

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