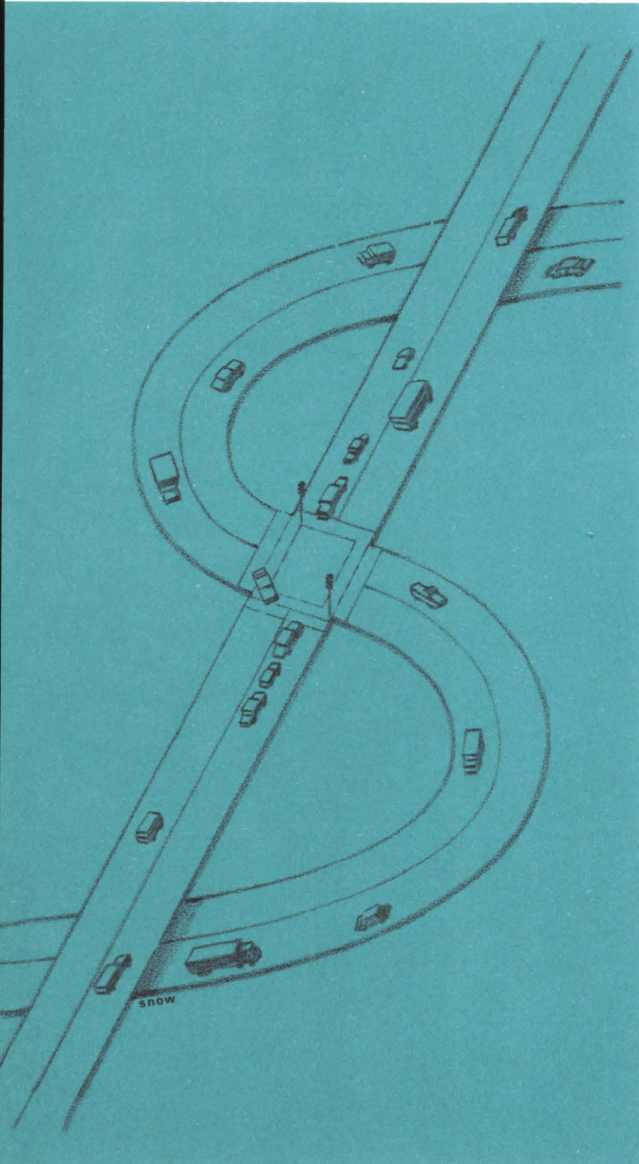


NEW ENGLAND BUSINESS REVIEW APRIL 1964



State Aid to Local Road Programs

State grants for local roads in New England are lower than in other areas. The result is a heavier property tax and a variable burden among localities.

Poverty in New England

For a variety of reasons the incidence of poverty is somewhat lower than in the Nation.

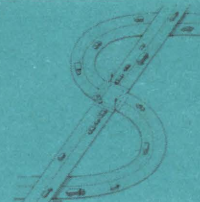
Family Skiing

A special survey shows the impact of family groups on the skiing industry.

FEDERAL RESERVE BANK OF BOSTON



NEW ENGLAND BUSINESS REVIEW



State Aid to Local Road Programs

OUR mobile society has clearly recognized the need for good interstate and intercity highways. The roads tie the economies of our states and metropolitan areas together. Financial responsibility for these highways is also clear. It is shared, according to federal highway aid formulas, between the Federal Government and the governments of the individual states.

Good local roads are also an important part of our highway system. However, financial responsibility for local roads varies widely from state to state. Furthermore, roads classified as "local" in some states are considered "state" roads in others. As a result, the quality of local roads and their maintenance varies widely from community to community. Even more variable are the local tax burdens for highway construction and maintenance.

In New England the cost of "local" roads is carried chiefly by local governments, particu-

larly in urban communities. To a very limited extent, the states of the region share in these costs. This article discusses the apportionment and amount of aid granted by the New England states for local road construction and maintenance. Although smaller in amounts, these problems are similar to those of state school aid.¹

Local Highway Spending

In 1962 local governments in New England spent about \$180 million for their roads and streets. Of this amount, state governments contributed only \$22 million.

The proportions of state aid to local expenditures for highways vary considerably among the New England states. For example, in 1961 Vermont communities received the highest proportion of state aid, 45 percent, and New Hampshire the lowest, 2 percent. These figures depend in part on the proportion of road mileage under local administration. In New Hampshire the state directly finances and administers construction on certain local roads. Nevertheless, the share of state aid in New Hampshire is very low.

Except for Vermont, all the states of the

¹ See: "State Aid for Education," *New England Business Review*, September 1963.

The New England Business Review is produced in the Research Department. George A. Bishop was primarily responsible for the article, "State Aid to Local Road Programs," Edwin C. Gooding and Ruth Norr for "Poverty in New England," and Stephen A. Lofgren for "Family Skiing."

region contributed a considerably lower share than average for the United States, as the table on page 4 shows.

Sources of Road Funds

In most states some taxes are earmarked especially for road use. These are highway user taxes. Their imposition rests on the concept that costs should be paid on the basis of benefits received. Thus, the major source of state funds for highways is the tax on gasoline. Across the Nation, state levies on gasoline typically range from 5 to 7 cents per gallon with some states charging slightly higher rates for diesel fuel. In New England these taxes extend from a low of 5.5 cents in Massachusetts to a high of 7 cents in Maine, New Hampshire, and Rhode Island. This tax is particularly important because of its reliable yield. Even during the depression of the 1930's total receipts from gasoline taxes rose. In recent years collections in Massachusetts with an unchanged tax rate have climbed steadily at an average increase of about \$3 million each year and now amount to more than \$86 million annually.

Other highway user taxes with steady, growing yields are automobile registration fees and operators' license fees. Usually registration fees are flat rates. In Massachusetts, for example, the charge is \$6 for each passenger car with higher rates for trucks and buses.

Some states have also recently adopted so-called "third structure" taxes. These are based on a recognition of the special added costs to highways of buses, trucks, and trailers. Thus, these heavy motor vehicles are taxed according to passenger mileage, seating or carrying capacity, tonnage, etc.

In addition, in most states sales, "use", or

other varied forms of property or excise taxes are imposed on cars. However, these taxes are not earmarked for roads but are used for general fund purposes by the states and localities.

Placing greater reliance on state aid would help reduce inequities of property taxation and encourage more rational allocation of state aid. Larger state grants could be financed either through an increase in gasoline taxes or through other state taxes. Where state gasoline taxes are lower than average, a small increase would provide a substantial amount of state revenue. In Massachusetts, for example, the state gasoline tax is lower than in four-fifths of the states. In the other New England states with higher gasoline taxes, other methods of state financing might be sought.

Current Methods of Apportioning State Aid

On what basis are state aids granted to localities? Many factors are considered and each state applies varying weights to them. Among the most frequently used criteria are population, road mileage, the number of automobile registrations, assessed valuations, and a fixed percentage of local expenditures. In addition, for rural aid purposes, land area and grants of equal amounts to each town are commonly used.

In general, these factors are weighted in favor of rural communities. In Massachusetts, for example, the largest share of state aid (Chapter 90 which is chiefly construction aid) is distributed roughly on the basis of 40 percent weight for local road mileage, 40 percent for population, and 20 percent for land area. Because road costs per mile are lower in rural than in urban areas, any flat sum granted per mile represents a higher proportion of aid to

**State Aid as a Percentage of All Revenue
for Local Highways, 1961***

	All Local Governments	Rural Governments	Urban Governments
United States	39.9	53.6	24.3
New England	14.7	48.8	3.6
Connecticut	24.3	77.9	7.2
Maine	18.0	32.5	7.9
Massachusetts	8.7	43.4	2.1
New Hampshire	1.8	5.5	—
Rhode Island	2.8	40.9	1.3
Vermont	45.0	56.8	8.2

* State aid does not include direct state expenditures for local roads and streets.
Source: U. S. Bureau of Public Roads, *Highway Statistics* 1962.

expenses in rural areas. The land area factor also favors rural places. In addition, Massachusetts has "Chapter 81" aid for maintenance which is granted only to towns where the equalized property valuation was less than \$5 million in 1945.

In Connecticut local governments are granted \$1,400 per mile for the first 23 miles of improved roads; beyond that mileage the amount of aid granted per mile is substantially reduced. Thus, the largest cities with hundreds of miles of heavy duty local roads receive much less per mile than does a rural community with less expensive roads. Maine matches local appropriations in a ratio depending on the locality's total property resources, granting relatively more to smaller places. Altogether, in New England about 80 percent of the state aid grants go to rural areas with population under 2,500. These rural areas account for less than one quarter of the population.

This policy of greater rural aid has been justified in the past on the reasoning that areas with low property valuations and many

miles of road need more aid. To a large extent this was and is true. However, times have changed and additional factors compete for consideration in state aid formulas. Unfortunately, these formulas have been adjusted very little and urban centers, despite their increasing population, their higher costs, and sharply rising traffic needs, receive only a very small share of

state aid. Not only is this share small but in Massachusetts and Connecticut it has actually declined in recent years. However, as the table above suggests, the problem in New England is not so much that rural aid is too big but rather that aid to urban communities is too small.

The small state share in New England suggests that too high a burden — and an inequitable one — is being placed on the local property tax. This is particularly true in metropolitan centers whose street and road costs are vastly increased by traffic from other areas. Moreover, per capita costs of government services in large cities are significantly higher as increasing numbers move to the suburbs. Many of the urban highway benefits thus go to people who live and pay property taxes elsewhere.

Analysis of types of motor vehicle use gives some indication of how highway costs could be equitably divided between local property taxes and state taxes. Studies by the United States Bureau of Public Roads show that through

traffic accounted for 63 percent of the vehicle miles traveled on local rural roads and 33 percent of those on local urban roads. Since through traffic has little relation to property values and taxes, the share of this type of travel could appropriately be financed by state gasoline or other taxes. At present, however, the proportion of through traffic is much greater than the state share of local road costs. This is especially true for urban roads in New England where the state share amounted to only 4 percent of total local expenditures.

Part of this problem could be solved by reclassifying certain "local" roads as "state" highways. In rural areas most state routes are entirely maintained by state highway departments. As soon as these roads move into cities and urban areas, however, the maintenance burden is placed on the local communities.

The financial burden to municipal governments of highways in metropolitan areas would be considerably lessened if the states would assume complete responsibility for all state highway extensions. In Connecticut a recent reclassification of roads has given the State full responsibility for state routes extending through urban areas. Such reclassification will help to relieve the local tax burden in many communities. In the Boston area some of this burden is carried by the Metropolitan District Commission which maintains a limited number of parkways and boulevards. In this way cities and towns served by the MDC are relieved of some financial responsibility, although they are assessed for about 40 percent of the maintenance charges.

Revising State Aid Formulas

Passage of time alone suggests that most of the region's states need to reconsider their

formulas for apportioning aid among the various communities. For a balanced distribution local highway needs as well as local property tax resources must be taken into account.

Local need can be objectively determined by measuring traffic density in the locality since this is the factor that really determines the expense of road construction and maintenance. Except for central cities, the number of locally registered motor vehicles for each mile of local road is a reasonably accurate basis for measuring traffic density. Thus, places with the most traffic density and the highest costs would be eligible for larger grants. In central cities a special allowance could be made for exceptional traffic densities attributable to vehicles registered elsewhere.

Differing local tax resources must be considered if state aid is to equalize the highway burden among the localities. A simple method of achieving this might be developed by applying foundation aid formulas long used for state school aids. Such a formula could provide that the state would make up the difference between a given expenditure per mile and the amount raised locally by a specified tax rate. New Hampshire, in fact, has had such a program since the 1920's. Its program currently provides that the State will grant aid equal to the difference between \$133 per mile of town roads and what is raised per mile by a tax rate of \$1.10 per \$1,000 of equalized valuation. Although these amounts of state aid are

A technical supplement to this article, containing notes, tables, and charts, is available on request from the Bank's Research Department.

small, varying resources are taken into account.

Such a formula could be easily modified to take account of the large differences in costs per mile of roads and streets with different traffic densities. Instead of a flat amount per mile, a varying amount could be used to reflect these cost differences. Moreover, in the formula both the measure of needs and the tax rate to determine resources could be adjusted accord-

ing to the amount of funds available for aid to local governments.

Conclusion

Revision of state aid formulas for local roads and streets is required if measures of need and resources are to be taken into account. Only in this way can state aid help cities and towns realistically and at the same time equalize differing local tax burdens.

Poverty in New England

PRESIDENT Johnson recently declared an "Unconditional War on Poverty." Despite the degree of material well-being enjoyed by most of the population, millions of Americans live in conditions of hardship. This is not only detrimental to the poor but to all of society. While the principal motivation for eliminating poverty is clearly humanitarian, another important consideration is that mass poverty is a drag on the economy.

To pinpoint the problem, this article examines the extent, nature, and locale of poverty in New England.

The Poverty Line

The study of many low-cost budgets has led the Council of Economic Advisers to define an annual income of \$3,000 as the poverty boundary for the average family. This is a weekly income of less than \$60.

In 1962, 21 percent of all the Nation's families — including more than 30 million people — had incomes under \$3,000. Over 11

million of these family members were children, one-sixth of all our youth.

Because the cost of living is slightly higher in New England than in most parts of the Nation, a \$3,000 family income in this region represents somewhat more hardship. But compared with the Nation and with other regions New England as a whole was more fortunate in that it had proportionately fewer families — 14 percent — with incomes under \$3,000. Within the region, however, the distribution of these poor families varied widely among the states. Connecticut had fewer families living in poverty — 9.8 percent — than any other state in the Nation. Massachusetts placed third among the 50 states in its low poverty incidence but in two of its old textile centers — Fall River and New Bedford — about one-fifth of the families were poverty stricken, almost twice the State's average of 12.4 percent. Rhode Island ranked 18th in poverty incidence. Here also considerable poverty existed in the old industrial centers such as Providence and Woonsocket.

Measuring Poverty

Measuring poverty is not a simple task. Obviously, adequate income and resources for two elderly people residing in the country would hardly be enough for a family of five living in Boston. A family's needs depend on many factors. Among these are the size of the family, the age of the children, the place of residence as well as the health of the members. The ability to fill these needs depends not only on current income but also on savings. Moreover, nonmoney income should also be considered. Homeowners may possibly need somewhat less for mortgage payments, taxes, and repairs than they would otherwise spend for rent. Farm families require smaller funds for food

when they raise considerable quantities at home.

Of all these considerations, however, money income is the most important in determining the family's level of living. Furthermore, the only data available for judging the current extent of poverty by region are money income figures reported in the 1960 Census of Population. Unfortunately, these figures may not be completely accurate. They may understate actual incomes. Some people forget their part-time jobs; others under-report. Despite these shortcomings, the data do provide a rough measure of family income and permit comparisons between regions.

In northern New England, New Hampshire had a lower incidence of poverty — 15 percent — than the Nation. On the other hand, more than a fifth of all families in Maine and Vermont lived in poverty. Those states ranked 29th and 30th in their incidence of poverty. The largest concentrations of their poor families were in the northern rural areas. To the extent, however, that rural families raise substantial quantities of food, they can make a given amount of income go somewhat further (see box above).

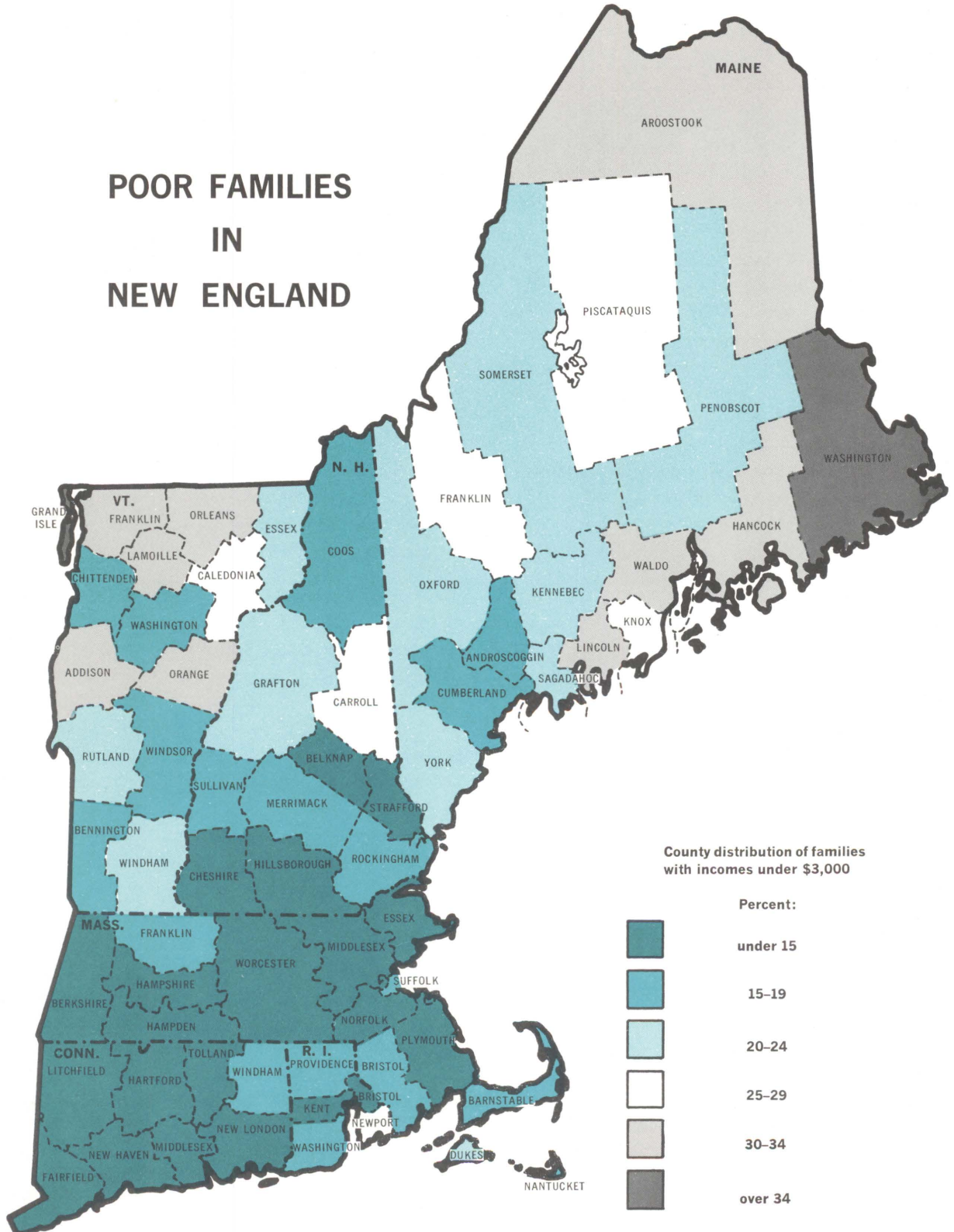
The New England map on page 8 pictures the proportion of each county's population with incomes under \$3,000.

The Reasons

As in the Nation poverty in New England is most prevalent among the farmers, the Negroes, the fatherless families, the elderly, and the uneducated. Among all these groups, however,

poverty is somewhat less severe in the region than in the Nation. This is largely explained by historical happenstance. For example, the region was from its earliest development only partially dependent on agricultural activity. When more fertile regions came into production, New England's limited agriculture began to decline. Over the years the farm population has gradually decreased. Because of this historical adjustment, very few farm families are now left in New England — less than 2 percent compared with more than 7 in the Nation. As a result of alternative work opportunities, the remaining New England farmers have higher incomes and lower rates of poverty than the national average. Altogether these two factors — fewer farmers and relatively higher incomes — account for about 2 points of the 7 percent differential between poverty in the United States (21.4 percent) and in New England (13.6 percent).

POOR FAMILIES IN NEW ENGLAND



The forces of economic history and geography also explain New England's smaller proportion of Negro population, a group with a very high incidence of poverty. Distance from the South and limited job opportunities have discouraged large scale migration of Negroes into the region. Today Negro families constitute only 2 percent of the New England total compared with more than 9 percent in the Nation. Since poverty rates among nonwhites are more than twice those of white families, a smaller proportion of Negroes helps to explain another percentage point of the region's lower rate of poverty.

Similarly, New England's relatively small size and compactness make the problem of labor immobility somewhat less serious in the region. In general, rural nonfarm residents are within commuting distance of a reasonably large city. Moreover, because the region has a diversified economy, more job opportunities are available for women. The result is that more family members work; family incomes are higher and poverty less frequent. For these same reasons, the incidence of poverty on fatherless families is not as great as the national average. In total, these factors — small size, compactness, and diversification — probably account for more than 2 points of the 7 percent difference in poverty rates between the region and the Nation.

However, not all of New England's low poverty rate should be attributed to historical accident. Conscious social policy almost certainly has played a significant role. Negroes living in New England, for example, are generally better educated than their counterparts in most other parts of the country. Moreover, the difference between median incomes for Negroes and whites is less substantial in

the region than in the Nation. It appears, therefore, that the economic cost of racial prejudice may be less serious in the region.

In addition, New England communities have historically placed considerable emphasis on education. Despite a very large immigrant population, education levels are high — increasing the value of the labor force to employers. All of these factors help account for the remaining differences between the national and regional poverty rates.

The Problems Ahead

New England is indeed fortunate to have lower than national rates of poverty. Nevertheless, even in Connecticut, one of the most prosperous states in the Union, one out of every ten families has an income under \$3,000.

The war against poverty must be made up of attacks from many broad directions. Some of these problems — like racial discrimination — are not in and of themselves economic; yet their solution would have a substantial effect on poverty and on the economy.

Another highly important area of endeavor is education. The resources needed for earning a secure place in our society are very different from what they were in the past. Only if the states make adequate provisions for good schooling can the citizens acquire these resources. In New England opportunities for good education are not equal in all localities.¹ This is in part a result of small amounts of state aid for education. In other areas improved formulas for state aid are more effective in offsetting differences in local tax resources.

Variations in the quality of schools among

¹ See: "State Aid for Education," *New England Business Review*, September 1963.

communities contribute to the dropout problem which is also tied to poverty levels. A recent New Haven study showed that almost half of the children from lower class neighborhoods do not complete high school. Yet in some sections of the country where provision is made for guidance and special programs, the dropout rate is being reduced. Taking action now to raise the level of education for our young people is one of the strongest weapons against potential poverty.

Just as poverty has no single cause, it has

no single or simple solution. Realistically, it may never be eliminated. On the other hand, the level of poverty can be reduced by increasing the mobility of the unemployed and the underemployed, by enlarging the coverage of social security and private pension plans, by improving the level of health, both mental and physical, and by stimulating a high rate of economic growth especially in depressed areas. It seems likely that with attacks from many fronts poverty rates will decline in the future as they have in the past.

Family Skiing

RESULTS of this winter's ski season attest to the importance and growing strength of New England's ski industry. Despite thin snow cover and erratic weather, business for January and February rose a healthy 8 percent above last year's record level. This estimate, based on guest occupancy figures submitted by lodging establishments in New England ski areas, would bring the Winter Vacation Lodging Index to 263 compared with 244 last year and a 1950 base of 100.

When the first U. S. ski tow went into operation near Woodstock, Vermont only thirty years ago, no one could have foreseen the ski industry we have today. Indeed, for most of those thirty years, skiing remained the province of dedicated enthusiasts who were willing to travel long distances and endure discomforts in order to participate in their chosen sport.

Today all this has changed and skiing is big

business. It is no longer an exclusive sport but a popular one. Moreover, it is fast becoming a family sport. This change is pointed up in a comparison of the data collected by this Bank in 1959 and again in 1963 on facilities offered at New England's major ski areas — those large enough to operate at least one cable lift.

During the five years 1959 through 1963 the New England total for all kinds of ski area facilities expanded. The number of cable lifts increased 27 percent (from 126 to 163) and uphill capacity 30 percent. Compared with the growth in number the lifts constructed were neither as high nor as long. Both length and vertical ascent increased about one-fifth. Downhill facilities also expanded; more trails and slopes added about 20 percent more miles of downhill skiing.

Primarily because of the great number of

new, small areas entering the ski business, the average ski area has declined in size and facilities. Thus, the average number of lifts operated declined from 3 in 1959 to $2\frac{1}{2}$ in 1963 with capacity reduced by 189 skiers per hour. The average length of lift was shorter by 19 percent (6,470 feet down from 7,962 feet) while vertical ascent declined by 16 percent (1,770 feet down from 2,119 feet). With one trail less, the length of all trails at the average ski area was shorter by one mile, yet the total area allocated increased on the average by three acres.

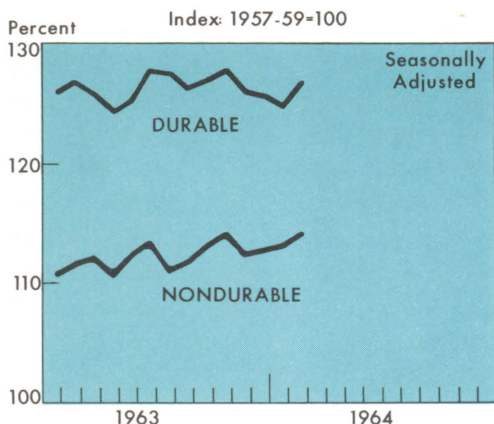
New England's newer ski areas are not simply smaller, which is to be expected of areas not yet fully developed, but differ in other ways from older areas. They seem in general to be operating on shorter hills, but these hills are steeper. These areas appear to be designed to attract family groups, the part of the skier market that is expected to be the major source of future industry growth. Generally, families prefer to ski in smaller areas which offer not only steep hills for the expert, but also wide slopes for novices. Such developments satisfy skiers of

varying levels of proficiency and enable the whole family to be together on a few slopes instead of being spread out over a large area.

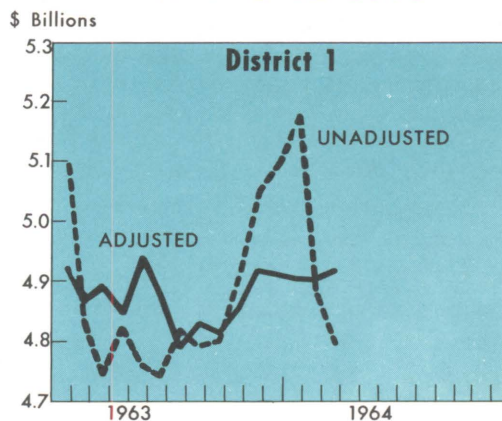
A check among ski area operators reveals that this trend toward family skiing affects both plans for new areas and the expansion of established areas. Operators are anxious to develop this new family market not only because it contains such a vast number of potential skiers, but because it promises to bring a stabilizing influence to an industry almost wholly dependent on the weather. Family groups make their plans further ahead and are less apt to move to another area or return home because of changes in weather and ski conditions. They tend to stay longer and, operators say, spend more money.

Just what changes the next thirty years will hold for New England's ski industry no one can say. We can only be sure that there will be changes and predict that skiing will continue to be a growing and important factor in the region's economy.

NEW ENGLAND MANUFACTURING



DEMAND DEPOSITS



Here's New England -

MANUFACTURING INDEXES (seasonally adjusted) 1957-59 = 100	NEW ENGLAND			UNITED STATES		
	pFeb. '64	Jan. '64	Feb. '63	Feb. '64	Jan. '64	Feb. '63
All Manufacturing	121	119	119	128	128	121
Nonelectrical Machinery	132	130	125	134	135	123
Electrical Machinery	125	125	130	134	134	131
Transportation Equipment	139	136	146	130	130	122
<i>Textiles, Apparel, Leather</i>	101	100	103	122	122	116
Textiles	105	104	110	119	118	113
Apparel	108	103	105	n.a.	132	123
Leather and Shoes	90	92	93	n.a.	102	99
Paper	116	118	117	129	128	123
	Percent Change From:			Percent Change From:		
	Feb. '64	Jan. '64	Feb. '63	Feb. '64	Jan. '64	Feb. '63
BANKING AND CREDIT						
Commercial and Industrial Loans (\$ millions) (Weekly Reporting Member Banks)	1,665	+ 2	+ 8	37,472	- 1	+ 9
Deposits (\$ millions) (Weekly Reporting Member Banks)	5,286	- 2	+ 6	138,128	- 2	+ 7
Check Payments (\$ millions) (Selected Cities)	11,401	-15	+10	174,191	-16	+10
Consumer Installment Credit Outstanding (index, seas. adj. 1957-59 = 100)	141.9	+ 1	+ 9	160.5	+ 1	+12
DEPARTMENT STORE SALES (index., seas. adj. 1957-59 = 100)	131	+ 9	+12	n.a.	n.a.	n.a.
EMPLOYMENT, PRICES, MAN-HOURS & EARNINGS						
Nonagricultural Employment (thousands)	3,741	0	+ 1	56,949	0	+ 3
Insured Unemployment (thousands) (excl. R.R. and temporary programs)	187	-10	- 3	2,299	- 7	-12
Consumer Prices (index, 1957-59 = 100)	109.4 (Mass.)	0	+ 2	107.6	0	+ 1
Production-Worker Man-Hours (index, 1957-59 = 100)	94.4	+ 2	- 2	100.8	+ 2	+ 3
Weekly Earnings in Manufacturing (\$) (Mass.)	93.13	+ 2	+ 3	101.15	+ 1	+ 4
OTHER INDICATORS						
Total Construction Contract Awards* (\$ thous.)	118,722	-21	+ 4	3,319,987	- 5	+12
Residential	50,244	-18	+19	1,374,897	- 2	+14
Nonresidential	44,896	-27	+11	1,113,960	0	+14
Public Works and Utilities	23,582	-11	-26	831,130	-16	+ 7
Electrical Energy Production (4 weeks ending Feb. 22, 1964) (index, seas. adj. 1957-59 = 100)	138	0	+ 4	147	+ 1	+ 5
Business Failures (number)	61	-23	+17	1,241	+ 2	- 5
New Business Incorporations (number)	773	-31	+ 4	15,495	-18	+10

*3-mos. moving averages Dec., Jan., Feb.

p = preliminary

n.a. = not available