Housing and Full Employment

By Benjamin Higgins

THEN war broke out, Canada had experienced six years of recovery, partly spontaneous and partly induced by economic policies undertaken at home and abroad. The national income had risen from a depression low of less than \$3 billion to over \$4.5 billion. The year before the war, while less prosperous than 1929, was nevertheless a "good year" on peace-time standards. $4\frac{1}{2}$ years of war have nearly doubled our national income again. In 1939, we were operating so far below full and efficient use of our resources that a more rational organization of our economy made it possible to devote more than half our "gross national product" to war¹, and still to raise the standard of living for masses of our people.

If we are as sensible in the use of our productive capacity after the war as we have been during it, we can double the flow of goods and services contributing to general welfare. An average income of \$2500 per family at present prices is not impossible. Few of us will want to work so long or so hard after the war as we do now, and some of the women, older men, and boys called into the labour supply by the exigencies of war will want to return to their housekeeping. their retirement, or their education; but these losses will be largely offset by the return to civilian occupations of the highly productive men and women now in the armed forces.

The Post-war Opportunity

Discussion of post-war economic policy has been so concerned with *problems* that many of us have lost sight of the post-war *opportunity*: an unheard of—almost

undreamed of—level of economic welfare for the Canadian people. Post-war problems there will certainly be; the provision of "optimum employment" while inflation is still kept under control is a highly delicate operation. However, the solutions of these problems are within easy reach, if we have enough courage and insight to use them.

To a large extent, we Canadians, get the kind of economic conditions we expect or think we deserve. After the last war, we continued for some time to regard inflation as the inevitable result of uncontrollable "outside forces"—and we got more inflation than we had during the war itself. Then government, business, and financial leaders began to argue that deflation was necessary—and we got depression. If we adopt a defeatist attitude towards the "post-war problem" we may well fail to meet it. If we insist on exploiting the "post-war opportunity" to the full, we shall very probably succeed.

Role of Public Work

Seizure of our post-war opportunity for an unprecedented level of economic welfare involves the accomplishment of four major aims. First, we must prevent unemployment from growing or national income from falling, and still check inflation. Second, we must eliminate underutilization or maldistribution of resources through monopoly in all its multitudinous forms. Third, we must distribute national income more equitably. Fourth, we must use our resources in the manner best calculated to yield useful results.

Public work, including all objects of public expenditure, has a large role to play in the achievement of each of these four ends. The secondary effects upon national income and employment that arise from the mere "process" of under-

EDITOR'S NOTE: B. H. Higgins is Bronfman Professor of Economics at McGill University. He was a member of the former Subcommittee on Housing and Community Planning, Dominion Advisory Committee on Post-war Reconstruction.

The cover chart illustrating this article was prepared by Prof. A. S. Mowat, Professor of Education, Dalhousie University.

Gross national product is the total value of all goods and services produced.

^{2. &}quot;Full employment" is so vague a term that it seems better to speak of "optimum employment." under which everyone has as much leisure as he would choose in preference to additional income, but no more.

taking public work and paving for it might be called its "process effects." They consist of re-spending of the income initially created by government outlays on public work, expansion of plant to meet the demand for materials and equipment used in public work projects, plus further interaction between increases in consumer spending and increases in private investment. In the depths of depression, when there is much excess capacity and widespread unemployment, the cumulative "process effects" of \$1 billion worth of public work might raise national income by \$3 billion or more. As the result of the current high level of government spending for war, unemployment and excess capacity have disappeared, and any rapid rise in national income after the war could consist only of inflation. However, "process effects" could still operate in reverse: failure to replace \$1 billion of war expenditures by \$1 billion of equally stimulating expenditures of another sort—public or private —could lead to a drop in national income of several billions.

Monopoly can be fought by public work in two ways. First, an entire industry can be taken over by the government and operated as a public utility. Second, new plant can be constructed or some existing plant acquired by the government to provide competition in the monopolized field, as in the case of the TVA or CNR. The use of public work in the form of public utilities to control 'natural monopolies' such as transportation, power, and fuel is established practice in most highly developed countries, and its scope could easily be extended to other monopolized fields as well.

Public spending usually provides goods and services for everyone that might not be available to the lower income groups if their provision were left entirely to private enterprise. Parks and playgrounds, hospitals, schools, police and fire protection, spring to mind. Thus public work affords a means of redistributing income from the higher to the lower income groups. Apart from the obvious ethical attractions of this process, it improves the market for other goods

and services bought by the lower income groups, by satisfying some of their needs at prices below cost. Indirectly, the redistribution of income involved in public work is "good business."

Finally, much public work is desirable for its own sake. Schools, hospitals, low-cost housing—such things cannot be provided to all on a profit basis without a redistribution of money income more drastic than most Canadians would pro-Even in a purely competitive society where optimum employment always existed, a good deal of public work would be undertaken simply because its direct contribution to welfare ("product effects") would be greater than any alternative use of the same resources could provide. Because of the need to supplement private with public investment to sustain national income, the need to curtail monopoly, and the need to redistribute income, the public work program may possibly be bigger than would be projected for its "product effects' alone. Nevertheless, the range of public wants is so great that there is no need for "boondoggling" no matter what the volume of public work. In the thirties, lack of preparation and the need to pay out money quickly resulted in a few projects of dubious merit so far as "product effects' were concerned. projects need not be undertaken after the war, since we still have time to prepare adequate plans in advance—if we start now.

In deciding what public work to carry out after the war, proposed projects must be evaluated in terms of their contribution to each of the four major aims of post-war economic policy. Housing, and particularly public housing, ranks high on all four counts.³

^{3.} This section is admittedly sketchy, and some readers may wish to supplement it with further reading. On the theory of public spending, the standard work is probably Alvin Hansen's Fiscal Policy and Business Cycles, New York, 1941. A shorter and somewhat simplified analysis is given in B. Higgins and R. A. Musgrave, "Deficit Finance—the Case Examined," Public Policy II, Cambridge, 1941. The classic work on planning public work is perhaps J. M. Clark's Economics of Planning Public Works, Washington, 1935. Some of the authors' views on this subject are presented in "Public Work and our Post-war Economy", Institute on Post-war Reconstruction, Second Series, New York University, 1943, and "Problems of Planning Public Work" in Post-war Economic Problems, ed. S. E. Harris, New York, 1943.

Housing and the Deflationary Gap

Earlier in the war, we heard much of the "inflationary gap"—the amount of income that had to be diverted from consumption channels by taxing, borrowing, and direct controls if inflation were to be avoided. After the war, we shall be facing a "deflationary gap:" the amount of non-war government spending that will be required to prevent a cumulative fall in prices and incomes as war expenditures are cut. Ignoring differences in "process effects" of different kinds of public and private spending, the deflationary gap can be defined as follows:

(Decline in war expenditures)—(Increase in private investment and consumption)—(Decline in gross national product compatible with optimum employment). Table I. presents an estimate of the deflationary gap for a few years after the war. The reasoning behind the

figures cannot be presented in full, but the following brief outline will give an idea of what was involved.

1943 Estimates based on best available figures.
1944 War expenditures rise slightly, non-war expenditures fall slightly. Private investment in plant and equipment, consisting almost wholly of replacement, will not differ widely from 1943. Ditto for inventory decumulation and net foreign investment. Decline in physical consumption offset by price rise. European war over by end of year.

1945 Japanese campaign requires two-thirds the war effort of the European campaign (compromise between British and American estimates). Few additional consumers goods available, consumption cannot rise more than 5% without inflation. Resources will not be released in exact proportions needed for reconversion, investment in plant and equipment rises only 20%. Doubtful if Europe is able to finance much increase in imports or if there will be net

TABLE I. GROSS NATIONAL PRODUCT AND THE "DEFLATIONARY GAP"

(in billions)	European War		Japanese War	Post-war Years		
	1943(a)	1944	1945	1946	1947	1950
Government Expenditure:						
War	\$ 5.0	\$ 5.3	\$ 3.5	\$ 1.0	\$ 0.3	\$ 0.3
Non-War-"Deflationary Gap"	1.0	. 9	1.9	2.2	2.1	2.7
Total	6.0	6.2	5.4	3.2	2.4	3.0
Private Investment:						
Plant and Equipment(b)	0.4	0.4	0.5	1.0	1.0	0.8
Inventories	0.1	0.1	0.0	.2	.3	0.2
Net foreign investments (c)	0.0	0.0	0.1	.2	:3	0.5
Total	0.3	0.3	0.6	1.4	1.6	1.5
Private Consumption:			4505			
Goods	3.5	3.5	3.6	4.5	5.0	4.8
Services	1.0	1.0	1.1	1.3	1.5	1.7
Total	4.5	4.5	4.7	5.8	6.5	6.5
GROSS NATIONAL PRODUCT	\$10.8	\$11.0	\$10.7	\$10.4	\$10.5	\$11.0

⁽a) D.B.S. figures revised on the basis of estimates in the Financial Post, April 17, 1943, widely regarded as more satisfactory.

⁽b) Includes private housing.

⁽c) Generally, equivalent to net exports including gold, less income from foreign assets.

capital outflow; net foreign investment will not rise markedly. Inventory accumulation and decumulation about balance.

Gross national product at optimum employment may fall somewhat. With Germany defeated, some 100,000 of the 300,000 women, older men, and boys drawn into labour supply may withdraw. be some slackening of effort, not likely to reduce productivity more than 5%. Labour force after withdrawals will be about 5 million, 5% decline equals loss of 250,000. Total loss, 350,000. Offsets: addition of 100,000 to labour force by natural growth of population, and demobilization of (say) 200,000 men. Military services now valued in gross national product at about \$80 per man per month; value productivity in civilian life will be at least double this amount. allowance for lack of skills and materials needed for reconversion, demobilization adds equivalent of some 150,000 men. equals $(250,000 \pm 100,000)$ loss(100,000 + 150,000) = 100,000 about $2\frac{1}{2}\%$ of labour force. Thus gross national product at optimum employment is about \$10.7 billion.

Deflationary gap is therefore \$1.9 billion. Japanese campaign finished by end of year (may be optimistic).

1946 War expenditures cut sharply.

Without special inducement through proper government policies, it is unlikely that private investment in plant and equipment would exceed \$1 billion per year, which would be double the rate for the twenties or the late thirties would almost equal the entire investment in war plant and equipment, and would replace in 20 years all plant and equipment, including agricultural buildings and implements, transportation facilities, public work, and housing, accumulated up to 1930. With pressure of consumer demand, inventory accumulation not likely to be much higher than in prewar years. Reduced exports of manufactured goods, increased imports from Britain, continued capital inflow due to greater inflation in United States will keep net foreign private investment from rising greatly. The supply of consumers' goods is not likely to rise more than 25\% in the first year after the war, with pressure on resources for reconversion purposes. Thus consumption cannot rise more than 25% without inflation.

Gross national product at optimum employment may fall further. 120,000 may withdraw from the labour supply, (not all new recruits to the labor force will want to retire from it) and hours may be reduced by some 10%. to diminishing returns, the loss of productivity in reducing hours from 44 to 40 per week will be less than 9\%-say 6%. Loss equivalent to 6% of 4.9 million workers equals 294,000. Total loss 414,000. Offsets: further growth of labour supply by 100,000 due to natural increase, probably some immigration (say 10,000) and demobilization of 450,000, equivalent to net gain of (say) 200,000. Net loss of productivity (414,000)—(110,000+is 200,000 = 114,000, about $2\frac{1}{2}\%$ of the labour force. Thus gross national product might fall to \$10.4 billions without unemployment or a fall in prices. tionary gap—\$2.2 billion.

1947 War expenditures cut to 10 times the prewar level.

Investment in plant and equipment continues high.

Inventory accumulation and exports rise somewhat.

Consumption no longer restrained by fiscal policy or direct controls (may be optimistic). Demand for services unlikely to rise more than 20%, demand for non-durable goods (mostly food) will be fairly constant. Demand for consumer durables will rise markedly. Figure based on assumption that every fourth family buys a car, a radio, a refrigerator, \$200 worth of furniture and \$100 worth of clothing in addition to amounts bought in previous years (probably much too optimistic).

Armed forces remain at 100,000—10 times prewar strength. Population growth, improved technique, make possible a rise in gross national product with optimum employment. Deflationary gap — \$2.1 billion.

1950 As replacement and reconversion is completed, investment in plant and equipment falls off. Similarly with inventory accumulation. With recovery abroad, privately financed exports may rise. As worn out consumer durables are replaced, demand falls off, propensity to save rises. Partially offset by population growth. Population growth, technical progress, raises gross national product at optimum employment. Deflationary gap—\$2.7 billion.

These figures are admittedly "guess-timates." They do, however, indicate the order of magnitude of the deflationary gap, on the basic assumption that unemployment or a price fall cannot be permitted, since either is likely to lead to a cumulative downswing ending in deep depression. It is interesting to note that the gap will in all probability be bigger some years after the war, when the first wave of replacement and reconversion is over, than in the immediate post-war period.

The gap may be filled by public work, by stimulating increased private investment, or—when increased supplies reach the market—by stimulating increased consumption. Family allowances and social security payments are means of increasing consumption. Private investment can be encouraged by subsidizing exports, by underwriting risky undertakings, tax concessions, and so forth. Nevertheless, it is clear from Table I that the public work program required will be very large indeed, and we need not circumscribe our plans in the housing

field by any considerations of costs. In any case, government activity in housing will consist at least as much of inducing increased private investment as it will of public investment.

Hitherto, we have ignored differences in "process effects" of various kinds of public and private spending. Postwar planners, however, must give these differences careful consideration. Interest on the national debt, for example, will have very low "process effects," since it is paid mainly to banks, insurance companies, and individuals in the higher income groups who do not spend the bulk of their incomes on consumption. A dollar spent on servicing the national debt will not replace a dollar formerly spent on tanks or planes.

Housing, however, ranks high in "process effects." Workers employed on a housing project, while highly skilled, are not so rich that they can save a large share of their incomes. The typical distribution of on-site wages among workers of various types is shown in Table II. In addition to the men employed o

TABLE II. CLASSIFICATION OF REMUNERATION PAID TO THE ON-SITE LABOUR ENGAGED IN BUILDING ONE HOUSING UNIT, ACCORDING TO DIFFERENT CONSTRUCTION TRADES

Construction Trade	Remuneration of On-site Workers		
	Dollars	Per Cent	
Masons and brick-layers	100.3	7.3	
Carpenters	508.2	37.0	
Plasterers and tile-layers.	125.0	9.1	
Glaziers and painters	65.9	4.8	
Roofers and sheet metal workers.	43.9	3.2	
Plumbers	181.3	13.2	
Electricians	39.8	2.9	
Semi-skilled and unskilled construction workers ¹	309.0	22.5	
Total Remuneration	1,373.4	100.0	

⁽¹⁾ Some overlapping might occur because there does not exist a clear-cut definition of skilled, semi-skilled and unskilled construction workers.

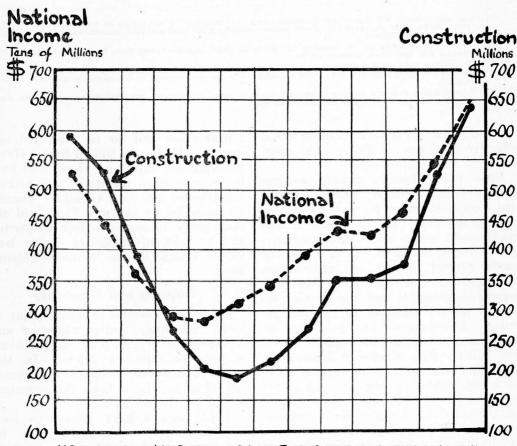
Source: O. J. Firestone, Labour Value of the Building Dollar, p. 29.

the site, some $1\frac{1}{2}$ times as many more are employed in producing and transporting materials, and still others are engaged in producing equipment used in residential construction. The respending of the wage-incomes generated by housing constitutes a significant demand for food, clothing, simple luxuries, and for housing itself.

Apart from wage payments directly or indirectly related to building houses, a housing program would help to sustain enterprise in various materials—producing industries, as indicated in Table III. Maritimers will be especially interested in the large share of the materials dollar that goes for lumber. A housing program of 50,000 units a year—which would be large relative to prewar building but small relative to needs—would maintain the Canadian lumber industry at something

like its present level of activity. Without some such support, the post-war outlook for the lumber industry is none too happy. Such a program would help enormously to provide markets for the other materials on the list, and also for construction equipment—cement mixers, bulldozers, tools, and the like—not mentioned.

When the effects of these demands on still other industries are taken into account, it is easily seen that the "process effects" of housing are very large indeed. The high order of these "process effects" provides much of the explanation for the close correlation between building cycles and the general level of income and employment, so often observed, and illustrated in Chart 1. While a final answer would require careful study of the labour—and materials—patterns in war industry as well as in construction, it seems



1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 Yazra

CLASSIFICATION OF CONSTRUCTION MATERIALS FOR THE AVERAGE TABLE III. HOUSING UNIT ACCORDING TO THE DIFFERENT TYPES OF INDUSTRIES

Types of Industry	Expenditure for Construction Materials		
Types of Industry	Dollars	Per Cent	
Cement, gravel and sand industry	157.5	7.3	
Brick and stone industry		5.7	
Lumber industry	945.3	43.8	
Lath and Plaster industry including manufacturers of insulation material	157.5	7.3	
Tile industry ²	45.3	2.1	
Linoleum industry		1.3	
Paint and glass industry		5.7	
Roofing material industry ³		3.7	
Plumbing industry		11.0	
Heating industry		8.5	
Electrical equipment industry4		3.4	
Other industries.		0.2	
Total Expenditure	\$2,158.2	100.0	

⁽¹⁾ The lath industry will depend on the lumber and steel industry for the supply of wood and steel to manufacture laths. The plaster industry will depend mainly on the sand and lime manufacturers for the supply of the material required. Some orders going to the tile industry will go to the brick manufacturers since there is some over lapping between tile and brick manufacturers.

ikely that a dollar spent on housing would effectively replace a dollar now spent on arms and munitions. Since public housing usually involves

a government subsidy, "process effects" are somewhat higher for public than for private housing. The difference is seen most easily in the case where housing is just being maintained. Rent collections cover current outlays on construction, maintenance, and repairs; disinvestment equals investment; and the process involves no net addition to national in-If occupants pay less than an economic rent and the government covers the balance with a subsidy financed by monetary expansion or borrowing, there is a net public investment, and a net contribution to national income, equal

tax financed, the redistribution of income

involved will tend to raise the volume of

Even if the subsidy is

to the subsidy.

consumption and so to raise national income. Moreover, United States Housing Authority experience shows that public housing often results in new private construction in the vicinity. Owners are impelled by the new "tone" of the community to improve their properties, and to take advantage of higher land values brought by the "better neighbourhood.

Housing and Monopoly

From an economic or social point of view, "monopoly" exists whenever any entrepreneur or group of entrepreneurs is able to influence prices. sense, the construction industry is jammed full of monopolists, from the unionized worker to the architect.

Trade unions have helped to keep building costs unnecessarily high concentrating their efforts on getting

⁽³⁾ The roofing industry will depend on the lumber and sheet metal industry, the asphalt and asbestos manufacturer for the supply of the material required. For the construction of flat roofs, tar and gravel will be

required.

⁽⁴⁾ This industry covers a number of manufactures of wires, sheet metal, electrical fixtures, accessory manufactures, plastics and rubber manufactures. etc.

higher hourly rates instead of higher annual incomes—with the result that before the war construction workers ranked near the top for wage rates and near the bottom for incomes. The unions have also bolstered costs by their failure to recognize the advantages to construction workers of improved techniques which, by lowering sales prices and rents, would lead to more construction and greater regularity of employment. Finally, they have insisted upon an occupational division of labour so fine as to be wasteful.

Materials producers (some of whom are not in this country) have developed building codes and complex agreements (such as multiple basing points) to prevent effective competition and keep their prices well above costs. The speculative builder, by pushing up land values out of all proportion to construction costs and by substituting flashy fixtures for careful construction, have still further increased the gap between what a man pays for housing and what he gets for his money. The real estate operators, by supporting building codes and irrational zoning laws designed to protect property values, help to prevent needed housing from being built or used. The architect has assisted in the conspiracy against the consumer by his reluctance to stop designing millionaires' mansions and to find ways of making his services available to people in the middle and lower income groups.

A housing program assisted and regulated by the government would provide several means of attacking monopoly in the construction industry. First, the assurance of a large-scale government program would provide a basis for negotiating wage agreements in terms of annual rather than hourly wages. The guarantee of steady employment would also do much to allay the workers' unfounded fears of prefabrication and other "labour saving devices." If necessary, the government could prove the advantages of new techniques by demonstration projects, and in this way marshall public opinion against organized labour's insistence on archaic methods. The same means could be used to combat combinations in the materials industries, if procedure under the Combines Investigation Act proves no more effective in the future than it has been in the past. If worst comes to worst, the government could even set up its own plants to manufacture materials. More direct influence could be exerted by setting high standards for units constructed with government participation in the mortgage.

By using condemnation procedures where necessary, artificially high land values could be pushed down. By requiring submission of acceptable master plans as a prerequisite for financial assistance, the value and usefulness of existing good housing and new construction could be better protected, and anachronistic zoning laws broken down. Finally, by giving architects a chance to work on large projects, by holding contests for designs to be used for inexpensive small units and paying well for them, and by employing a limited number of architects in the Dominion, Provincial, and local housing authorities, the special knowledge of the architect could be made available to everyone.

Housing and the Distribution of Income

It is a notorious fact that private enterprise builds few homes for people whose incomes are below those of the upper The National Housing Act of 1938 was designed to increase the opportunities of home ownership by reducing mortgage interest rates and the size of the down payment; but only 20% of the houses built with NHA assistance between 1938 and 1941 could be bought for less than \$3,000. The monthly cost of owning a \$3000 home, including interest, amortization, taxes, maintenance and repairs averages above \$30 per month. In 1941, about two-thirds of Canadian families had incomes below \$1800. Thus on the usual assumption that a family should not pay more than one-fifth of its income in rent, only 20% of the houses built under NHA in those three years

were inexpensive enough for people below the top income third.

Of course, not every family needs a new house; but a house built originally for a family with a \$5,000 income does not become suitable for a family with a \$1000 income by the mere process of wearing out. In any case, the average value of owned homes in urban centres was over \$3600 in 1941, and therefore disproportionately high in comparison to average family incomes. Thus even if the owner-occupied houses had been properly designed for the lower income groups, they would have been too expensive.

Owned homes are probably somewhat better houses than rental units as a whole, and the present writer holds no brief for home ownership as such. Perhaps rental units are better adapted to incomes? Referring again to the 1941 Housing Census, we find that in the twelve metropolitan areas of this country, nearly 90% of tenant families were paying rents too high for their incomes. The proportion is lower in some cities, ranging from 66% in Halifax to 92% in Winnipeg. It goes without saying that many families paying rents they can afford, are getting hopelessly inadequate quarters, and that others are paying more rent than they can afford and still getting substandard accommodations.

There can be no question, therefore, that a program designed to reduce costs of renting or owning homes for the middle income third, and to provide subsidized public housing for the lower income third, so that everyone could afford to live in decency, would involve a substantial redistribution of income in a form basic to welfare.

The Need for Housing

How much housing is needed for its own sake ("product effects") in the postwar decade?

The housing need has three main

First, increases in population by natural growth or immigration must be provided for. Houses must be built for new families or non-family groups formed, and to replace the number of good houses removed from the available supply by demolition or by migration of industry and population. Second, to the extent that the existing stock of houses is too small to prevent overcrowding, additional units must be built. Third, substandard units constituting a menace to health, morals, and good citizenship must be cleared away and replaced. Final figures on each of these three aspects can be obtained only by careful local surveys, but census data provide some bases for preliminary estimates.

In the decade between 1931 and 1941, new families were formed in urban centres at the rate of some 23,000 per year. Immigration will probably be higher in the post-war decade, and some service men will bring back families. A conservative estimate would be that 25,000 units per year will be needed for new families. In addition, at least 10,000 units will be required for new farm families and non-family groups (single men and women living away from their parents, and so forth). Finally, even if we can assume an average life expectancy of houses of 60 years, about 15,000 units per year must be built to replace houses that are demolished or become Thus we must provide some 50,000 units per year just to keep housing conditions from getting worse than they will be at the end of the war.

To avoid overcrowding, at least one room per person is necessary. Living room and kitchen constitute two rooms, and more than two persons to a bedroom is clearly undesirable. Even this standard may be too low, where a family has two children of different sexes. On this criterion, about 150,000 urban units were overcrowded in 1941. It seems likely that another 35,000 overcrowded units existed in rural and farm areas. If we were to insist on each family having its own dwelling, the figure would be

Some of the relative disadvantages of home ownership in a rapidly changing industrialized economy like ours are outlined in B. Higgins, "Post-war Housing: For Sale or Rent?", Quarterly Review of Commerce, Vol. X, No. 2 (1943).

somewhat higher. In addition to overcrowded units existing in June, 1941, when the census was taken, current construction falls short of current needs by some 20,000 units per year. Even if the housing program is started at the beginning of 1945, by that time another 70,000 units will be needed to eliminate overcrowding, bringing our total to 255,-000—say 25,000 annually if the job is to be done in the post-war decade.

The figure for substandard units clearly depends upon how high standards are Some element of arbitrariness is inevitable in such estimates, but there is common agreement among "housers" as to the chief criteria of inadequacy. Houses with windowless rooms or otherwise completely inadequate in construction or design, houses lacking toilet or bathing facilities, housing infested with vermin, houses needing major repairs these are usually considered substandard. Such things in themselves may be less important than the squalor, ugliness, and filth typical of "slums," but are so closely correlated with slum conditions as to provide a reliable indication of them. Census data show the presence of at least 200,000 such units in urban centres. Slums, however, are by no means confined to cities; some of the worst slums are in villages and on farms. Another 50,000 units must be allowed for these, bringing the total to 250,000, or 25,000 per year, if slums are to be cleared in the ten years following the war.

Altogether, Canada needs a residential building program of some 100,000 units a year in the post-war decade. High as this figure sounds, it is low on a per capital comparison with estimates for the United States, New Zealand, and Great Britain. At an average of \$3500 per unit—it ought not to be higher the total public and private outlay for such a program would be only \$350 million per year. A glance at Table I suggests that this figure is only a fraction of the deflationary gap, and a certain amount of private housing is already included in the private investment figure. Meeting the housing need will undoubtedly make a substantial contribution to post-war prosperity, but if we are to grasp the post-war opportunity firmly, we must think not merely of housing but of urban redevelopment, including hospitals, schools, parks and parkways as well as houses, elimination of blighted areas as well as slums.

Legislative Needs

To build in one decade a million homes of the right sort, in the right places, and properly related to the communities in which they stand, we shall require much careful planning. Housing plans must be integrated with plans for schools, stores, hospitals, police and fire protection, and other services. Financial aspects must be thoroughly studied. Such planning requires a good deal of expert know-The first piece of housing legislation enacted should set up within an appropriate branch of the government —perhaps in the Department of Reconstruction foreshadowed in the Speech from the Throne opening the 1944 session of Parliament—a Dominion Housing and Community Planning Agency. Provincial Town Planning Boards and Local Housing Authorities must also be organized where they do not already exist. These steps must be taken well before the war ends, if a housing program is to be ready to start when it will be most needed.

In the private housing sphere, legislative needs can be met by attention to the monopoly elements in the construction industry and by revision of Part I of the present National Housing Reducing the mortgage interest rate from the present 5% to 4%, lowering the down payment from the present (usual) 20% to 10%, and extending the amortization period from the usual 20 years to 30 years or even more, would do much to encourage private housing. Cooperative building societies and trust funds should be made eligible lenders. The government's share in the mortgage might be made flexible to take care of variations in risk, and co-operative housing might be given some special encouragement.

Farm housing presents problems peculiar to itself, and may require separate legislation. Government assistance that would eliminate down payments altogether and make possible mortgage rates even lower than 4% would be one possible solution.

The chief legislative requirement is a true "public housing" bill, under which the Dominion government would be enabled to pay annual subsidies to local housing authorities, to cover the gap between economic rents and the rents that people in the lower income third

can afford. The Dominion government should also be permitted to provide most or even all of the original capital funds, at low rates of interest and with very long periods of amortization. Tenure in such public projects should be limited to families with incomes below (say) \$1200, and rents should be graded according to income.

There are indications that whatever government is in power after the war it will undertake some sort of housing program. It is up to the people of Canada to make sure that adequate housing legislation is passed in time.

Maritime Forests and Their Future

By B. W. Flieger

In this sixth year of war we see the great encounter on the fighting front close at hand. On the working front at home we pause sometimes to view the galaxy of plans which grows in brightness against the day when people quit the fight and turn to gather up the fragments of a peaceful life.

These, which the skeptics call plans for the bright new world, are compounded of pick-me-ups to counter probable after spree jitters and tonic ingredients for long term improvement. They are the result of much overtime work of excellent quality by interested persons.

All efforts to chart the good channel in the post war years regardless of the real urgency, the cost, and the obstacles in the way, fall readily into two classes. First, those plans which for obvious reasons can count on the support of the public, and second, those which for their continued success and fruition depend upon the sympathy and co-operation of a large bloc of our people but which are presently looked upon with detachment and sometimes outright hostility because

there is a general lack of understanding in the public mind of current conditions which are unsatisfactory. Planning which contemplates radical change in the future use of the forest resource of the Maritime provinces belongs at this time in the second category.

The Endowment of The Forest

Why is it that people on the street are not talking forestry in the same breath with the rehabilitation of our fighting men with public health and social security and full employment after the war? Why is it that men high up in the political and financial worlds refer to forestry in vague terms after they have spent themselves in painting the other futures for us? Truly it is because we in Canada and in particular in our Maritimes have, with less cause than others, grown ignorant of the responsibility that attaches to a great endowment of forest. In fact we are far removed from a clear cut conception of the peculiar nature of this resource after over two centuries of free exploitation of the land. But this is natural, all things considered, and does not deviate

EDITOR'S NOTE: B. W. Flieger is Professor of Forest Engineering at the University of New Brunswick.