

mer but with careful planning and a competent and knowledgeable work force a contractor need have no more fear of a winter project than any other operation. The quality of the work need not suffer; in fact conditions in winter are often more favourable for the production of high quality construction than those that exist in hot weather. Our scientists tell us, for example, that concrete placed and cured at low temperatures above freezing will attain a higher strength and greater resistance to exposure than when subjected to the higher temperatures of summer.

INCENTIVES AND PUBLICITY

The Canadian Government has shown much leadership in promoting higher levels of wintertime construction and employment. Internally, a directive from the Federal Cabinet was sent to all government departments and agencies in 1954 requiring them to arrange their construction, maintenance and procurement programmes so that the maximum employment of the construction trades would occur in the winter. A large-scale "Do-It-Now" campaign was initiated by the Department of Labour directed at homeowners, business and institutions to carry out repairs and renovations during the winter. The Minister of Labour convened a National Winter Employment Conference in July, 1958. Films were produced showing how both housing and non-residential building projects could be built in the winter months, using proper techniques. The National Research Council's Division of Building Research published technical information. The Winter Work publicity material was used by a good many firms in institutional advertising and tie-in campaigns. In summary, it is fair to say that "Do-It-Now" and "Why Wait for Spring?" are part of Canada's popular speech.

Exhortations alone, however, do have their limitations and the Federal Government was urged to provide financial incentives to encourage owners to schedule their construction work in the winter months. Commencing with the winter of 1958-59, the Federal Government made available to Municipal Governments grants equivalent to half of the payroll cost of certain municipal projects incurred during the designated winter period. Most of the Provincial Governments also picked up part of the payroll cost so that the Municipalities' share averaged only 25% (in Quebec it is only 10%). This "Municipal Winter Works Incentive Programme" has been expanded in scope from time to time in the light of experience and is now a built-in feature of many municipalities' construction programme. The Federal share of payroll costs was increased to 60% in 1963-64 in areas with high wintertime unemployment conditions. In the ten-year period, some 57,300 projects have been included, with an estimated total cost of \$2,323 million. Over 35 million man-days of work have been provided and it should be noted that most of this work would formerly have been scheduled in the so-called building season. The total cost to the Federal Government to date has been \$282 million.

Other programmes involving the joint financing of public works projects have—on a smaller scale—contained winter works incentives. For example the Federal Government offered to pay half of the labour cost of picnic and camp grounds built during the winter alongside highways by the Provincial Governments.

Much of the seasonal unemployment in the building trades has been in the housebuilding sector. As an incentive to encourage wintertime housebuilding, a bonus scheme was introduced for the winter of 1963-64 whereby the purchaser of a house substantially completed in winter received a cash bonus of \$500, which could be used as part of the down payment. While this programme did not significantly increase the volume of housebuilding, it did have a very marked effect on the starting dates, from spring to the fall. Some 95,500 dwelling units qualified for the bonus in the three winters in which the Winter House Building Incentive Programme operated. Because of a shortage of mortgage money, the scheme was not offered in the winter of 1966-67 but a somewhat similar effect was achieved by the Canadian Government by providing direct loans to housebuilders that fall.

It will be noted that these grants and bonuses are directed at the Owner rather than offered to the Contractor. This reflects the philosophy that the construction industry is not looking for subsidies itself and, indeed, should not require any special inducements—but is willing to provide construction services at any time of the year. The Canadian Government, for its part, feels that the funds spent internally and externally on wintertime construction and promotion have paid off handsomely in terms of business activity and reduced outlays from the Unemployment Insurance Fund and in unemployment assistance.