Environment

obtained suggests that modest crowding, such as may exist in Canadian housing units, as a rule does not adversely affect the health, family life, or behaviour of the inhabitants.

Discernible emotional stress or physical illness, however, need not be the prime criterion for determining the suitability of a particular housing form—high-rise apartments—for household-type families with children. Less stringent criteria, such as dissatisfaction with the living environment, also must be given due heed. In this vein the studies have, as an example, found that the arrangement of space—the design and layout of rooms in the dwelling unit—is at least as important to the satisfaction of the occupants as the total amount of space available. Though tentative, the evidence further suggests that certain dwelling types are better suited to particular stages of a person's life cycle, with apartments being more suited to the lifestyles of single adults and the elderly, while low-rise single-detached units are more conducive to the needs of families.

Lest the wrong impression be created, government research related to the urban environment extends beyond the dwelling unit and the residential area. Thus, in recognition of the fragmented and unco-ordinated approach taken to open space planning in many Canadian communities, a set of guidelines for urban open space planning has been developed and widely disseminated by the Department of Urban Affairs, in conjunction with the Canadian Parks and Recreation Association. Guidelines are provided for the selection of locations and planning of uses for a diversity of open space areas ranging from small pocket parks through to neighbourhood playgrounds, community sports fields and regional conservation areas. The guidelines indicate that some factors which should be taken into account in developing open space areas are the size and spacing of areas, the frequency and intensity of use, the sociodemographic composition of the population and the prominent natural features.

The need to provide a better environment for children caught in the midst of rapid urban growth has prompted several government activities. At CMHC the children's environment advisory service was established some four years ago to provide information on creative day care centres, playground facilities and play areas in residential projects. On a longer term project basis, urban affairs is associated with the University of Toronto and the Hospital for Sick Children on "The Child in the City" research program. The project team is currently exploring how the health, opportunities and well-being of children are affected by the physical environment and social changes in cities.

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Nor has the importance of public participation to effective urban planning been overlooked. It has been widely acknowledged that involvement by citizens in expressing their needs and establishing community priorities can increase the responsiveness of urban plans, heighten the citizens' sense of personal efficacy and reduce their alienation with big government. As a consequence, the Department of Urban Affairs is currently performing research to determine the types of circumstances [Mr. Harquail.]

and range of techniques that would allow for a more effective citizen participation in the urban decision-making process.

Research into problems inherent in the management of urban growth have been tackled from several angles. As an ever increasing number of Canadians have chosen to live and often work outside the traditionally built up areas of cities, the downtown areas of many Canadian urban centres have declined in a physical, social and economic sense. In response, the department has begun to explore the various options available for revitalizing central areas, including a study of how the residential component can be retained within the urban core area.

Another pressing issue facing urban centres is the increased demand for adequate housing coupled with a continued decrease in the supply of suitable serviced land. To preserve agricultural land and to provide housing, the ministry has begun to examine the potential that previously built-up residential areas have for accommodating additional growth through the introduction of infill housing which utilizes existing infrastructure and amenities.

Inquiry into the causes and consequences of urban growth often takes the form of a joint endeavour with the provinces. Urban sprawl, a pattern of settlement characterized by a small number of scattered communities, ribbon development and large, thinly populated rural areas, can encroach on productive farmland, engender excessive use of the automobile, despoil natural areas and severely strain the financial capacity of government. The ministry, in co-operation with the province of New Brunswick, has therefore embarked upon a full investigation of the broad fiscal, social and environmental costs and benefits of urban sprawl to governments and individuals in New Brunswick. It is anticipated that the study will provide policy options and suggest alternative settlement patterns suitable to the province.

In a similar vein the federal government and Saskatchewan have recently agreed to support jointly the study of development in the areas surrounding Regina, Moose Jaw, Saskatoon and Prince Albert. The studies will encompass concerns such as agricultural use, urban sprawl, small community development, housing and regional services.

Last in this description but by no means least is the research effort that has touched on the broadest array of aspects of the urban human environment, namely, the development of quality of life profiles for Canadian cities. Under development for Canada's large and medium-size centres are statistical portraits of the health, education, work, leisure, housing, income and other aspects of residents' lives. Also measured are city differences in the provision of urban services such as health care, police and fire protection, recreational facilities and cable television. In order to expand public awareness and stimulate discussion on quality of life issues, some results from the nation's metropolitan areas have been reported in the publication "Urban Indicators: Quality of Life Comparisons in Canadian Cities".

Quite apart from the engrossing but somewhat frivolous pastime of determining which city is the best read, most