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SOCIAL AND ECONOMIC DIMENSIONS OF AN AGING POPULATION

**Cohort Survival Analysis is Not Enough: Why
Local Planners Need to Know More About the
Residential Mobility of the Elderly**

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SEDAP Research Paper No. 53

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**Cohort Survival Analysis is Not Enough:
Why Local Planners Need to Know More About the
Residential Mobility of the Elderly ***

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Abstract

The residential mobility choices of the elderly (aging-in-place, local moves, or migration) have very different policy implications forming a dynamic system of inter-related issues that present planners with a number of dilemmas which are particularly sensitive to local context. These include competing models of care and service delivery, provision of appropriate housing, physically and socially supportive local environments, community development, relocation services, housing specialization and age integration, the introduction of housing options within neighbourhoods, population redistribution, economic development, social integration, and localized differences in the demand for services. Local planners need to move beyond simple estimates of future demand based expected numbers and present use patterns, to examine the possible impact of these issues on the integration of an aging population within their communities.

Planners are challenged by a complexity of inter-related policy issues which has developed in response to "questions about the provision of income security for the aged, the increased demands on the health-care system, housing, transportation and other service needs" (Marshall, 1987:1). Taber (1980) has suggested that such issues have many of the characteristics of the complex, ill-structured problems described by Rittel and Webber as "wicked" (1973). For example, although issues associated with the care of the elderly have a high priority in advanced countries, policy debates reflect the lack of a consensual definition of "the problem(s)". Moreover, such ill-structured planning environments "resist concerted social action because they mobilize conflicting interests" (Taber, 1980:247). As Kane and Kane have observed, "discussions of long-term care alternatives tend to resemble cacophony more than symphony" (1980:249).

When planning for an aging population, especially for the large baby boom cohorts, one cannot assume that it is simply a question of greater numbers. Too often, projections of future demand are based on the estimated number of older people that will be in the population and the assumption that current use patterns will continue, paying little attention to the changing characteristics of older people and their communities.

With the recent shift to a community-based approach to meet the needs of seniors (Gee and McDaniel, 1994), local planners are challenged to find ways to integrate an aging population into communities which have not been designed for this purpose (Yeates, 1978). Many of the ways this goal can be achieved are contingent upon whether older residents will decide to age-in-place in their pre-retirement homes, make a local move within the community, or migrate into or away from the community. Planners need to know more about these residential mobility choices because they have different policy implications. This paper examines the varying policy implications of different residential mobility choices of the elderly and associated planning dilemmas faced by policy makers

seeking to facilitate the integration of the elderly into the community.

Policy Implications of Residential Mobility Choices in Later Life

The shift in policy from a medical model of service delivery to a more community-based integrated approach and the associated popularity of the concept of "aging-in-place", have contributed to the development of a myth "that the elderly are geographically stable and generally immobile, at least until forced to move into an institution" (McPherson, 1988). On the contrary, there is evidence of considerable residential movement in the elderly population in Canada, most of which is local (Che-Alford and Stevenson, 1998; Moore *et al.*, 1997; Northcott, 1988).

For the purpose of this paper, residential mobility is defined as a "physical movement, that is, a [permanent] change in the place of residence" (Northcott, 1988:5), regardless of distance. The term migration is used to denote residential mobility involving the crossing of a boundary, usually that of a municipality or province, while local mobility refers to movement within this boundary. On the other hand, the term aging-in-place describes "the tendency for older adults to remain in the same home and neighbourhood in which they have lived most of their adult life" (McPherson, 1990:457).

Research on elderly residential mobility specifically is a relatively recent phenomenon (Northcott, 1988). Much of the research has tended to be empirical and descriptive, focussing on population age distributions, migration streams, or socio-demographic characteristics of movers as compared with non-movers. The early taxonomic work quickly established that movers and non-movers had different characteristics, and that there were different types of movers (*e.g.* Biggar, 1980; Wiseman and Roseman, 1979). Senior migrants as compared with local movers were found to have very different profiles, suggesting a social and economic selectivity in the type of move made, with the healthier and wealthier being more likely to migrate (Biggar, 1980). Differences have also been

found with regard to the timing and type of a move (Litwak and Longino, 1987; Rogers, 1988; Yee and Van Arsdol, 1977).

Overall, the great proliferation of decision-making models (Rudzitis, 1979) and theories of elderly residential mobility, reinforce the impression that this is a very complex process, influenced by a wide variety of factors. A number of dilemmas are appearing as we begin to plan for an aging population, in part because associated with these observed differences in mobility groups are outcomes (aging-in-place, local mobility or migration) which can have very different policy implications.

Aging-in-place

Researchers of aging-in-place have been studying the meaning of home and attachment to place (*e.g.* O'Bryant, 1982) as explanations of elderly residential satisfaction, inertia and differences between movers and stayers (O'Bryant and Murray, 1986). Residential inertia is thought to be a result of: residential stability, as indicated by length of residence, a small number of previous moves, and home ownership; social bonds, both formal (*e.g.* church membership) and informal local friendship and kinship ties, and an associated neighbourhood satisfaction; an economic accumulation of "location specific capital" (Oldakowski and Roseman, 1986); and psychological ties, such as the need to maintain a sense of environmental and temporal continuity through the home, as a repository for meaning and personal identity (Rowles, 1987).

The policy implications of aging-in-place are numerous. The trend in policy development has been to place a strong emphasis on the role of formal community support services (Wheeler, 1982), with some acknowledgement of the roles of informal caregivers, and little recognition of the inter-related housing, transportation and land use issues. Over the past decade there has been considerable

discussion of models of care and service delivery. Although the community care model is gaining acceptance, issues concerning how this will be implemented, the relationship between informal and formal care, privatization of services, and the co-ordination of service delivery, remain in contention (Gee and McDaniel, 1994; Taylor, 1998).

The affordability, suitability, and condition of homes for aging-in-place can also be important. With regard to affordability, policy issues include such things as income security, home equity conversion, tax abatements, renter protection, and shelter allowances/subsidies (Brink, 1986; Golant, 1992a; Howe *et al.*, 1994). Sources of supplementary income, such as home occupations, home sharing, or the rental of accessory apartments, can be contentious issues for local planners (Howe *et al.*, 1994; Pollak and Gorman, 1989). Concern about the suitability and condition of homes suggests a need for policies regarding the rehabilitation or repair of existing housing and the promotion of barrier-free or adaptable design (Brink, 1986; Dunn, 1991; Howe *et al.*, 1994; Leather and Mackintosh, 1993; Pynoos and Regnier, 1997; Wheeler, 1982). One dilemma faced by planners trying to facilitate aging-in-place is associated with private ownership, property rights, and the constitutional extent to which private housing can or should be regulated to be barrier-free or adaptable. Alternatively, they must be prepared to adopt a continuing policy to subsidize the rehabilitation of private housing, or to compensate for unsuitable housing with a higher level of community support service.

At a larger scale, considerations of community composition and the availability of physical and social supports for aging-in-place within the neighbourhood are important planning policy issues (Greenberg, 1982; Hodge, 1990; McClain, 1991; Mish and Rice, 1998). Hodge (1991a:12) has argued that "the main challenge for community planners is to design (or more likely, redesign) communities amenable to the needs of seniors". Even when planners have little control over factors

influencing the local accessibility of services and facilities, the "planning system can ameliorate or accentuate the difficulties caused, and that in itself might make an impact on the independence of old people" (Greenberg, 1982:410).

During recent decades the suburbanization of older people as they age-in-place and their children mature and leave home has raised a number of policy concerns, such as a reorientation of local community services and facilities designed for young families to those required by the elderly, and an associated concern with the need for planning and policy initiatives to create enabling physical environments for suburban elderly (Golant, 1992b; Hodge *et al.*, 1994; Hodge, 1998; Patrick, 1980). In addition, there is an increasing regional disparity in the demand for social services for elderly who are aging-in-place, associated with the differential maturity of relatively homogeneous post-war suburbs (Moore and Rosenberg, 1994).

The local environment of seniors aging-in-place can also represent familiar surroundings which contain informal sources of support (*e.g.* friends, neighbours, and kin) and more formal social bonds such as churches and clubs (Hodge, 1990), which could influence their moving decisions (Connerly, 1986). Evidence of an increasing social and spatial separation of the elderly from relatives and friends (Warnes, 1982; Moore *et al.*, 1997; Smith, 1998), suggests that planners who wish to facilitate aging-in-place will need to rethink the meaning of community for the elderly and the potential role community-building as a policy alternative (Hodge, 1990).

To summarize, the option of aging-in-place has a broad range of policy implications associated with the provision and delivery of community support services, the design or adaptation of housing, the development of physically and socially supportive local environments, and the inter-relationships of these factors. However, for a number of reasons, aging-in-place may not be suitable for many seniors (Leather and Mackintosh, 1993). Once residential mobility enters the equation, policy

implications change, even when the moves are local.

Local Mobility

Although elderly residential mobility mostly involves local moves, research on local mobility is sparse (Carter, 1988), especially in Canada (Moore and Rosenberg, 1993). Wiseman (1980) has suggested that there are five different types of elderly local movers, those making: an amenity move; an environmental push away from undesirable housing; a relatively involuntary assistance seeking move; a continuing pattern of chronic mobility; or forced relocation. A potential sixth group which have issues in common with local movers would be involuntary stayers, those who would like to move but are unable to due to a lack of options and/or resources (Moore *et al.*, 1997). With the exception of the amenity movers, these groups tend to share a relatively low resource level, particularly low income, poor health and widowhood. In general, seniors make local moves at a later developmental stage associated with declining health and a need for assistance (Carter, 1988). Although one might expect that these moves would be towards the city centre where there is a higher density of life support facilities and less dependence on personal transport, Wiseman and Virden (1977) found that most of the movement was outward or lateral, within and between suburbs.

The policy implications for planners wishing to facilitate local mobility are varied. Since local movers remain in their greater community or neighbourhood and in the same service delivery system, their needs often appear to be synonymous with those who are aging-in-place, a possible explanation for the lack of research interest in this group. Local moves are often thought to be primarily housing adjustments (Wiseman, 1980; Joseph and Cloutier, 1991). However, a move to a more manageable home near kin, for example, could also influence the type and balance of informal and formal support services used, and may reduce transportation-related problems (Joseph and Hallman, 1996).

Even a local move can be mentally and physically demanding and at times overwhelming for the elderly (Lawton, 1986; Levi and Petty, 1992). With the exception of moves into institutions, little policy attention has been given to relocation services, such as help with the search for alternative housing, financial and physical help with moving, and help to get settled in the new residential situation (Leung, 1990). There are a few examples of the use of financial incentives to encourage "over housed" seniors to move into smaller units (Brink, 1986). However, Lawton (1986) has expressed concern that such programs may result in the exploitation of older people.

With local mobility, planning issues associated with housing and/or neighbourhood specialization become important. The policy focus shifts to the provision of housing options that "respond effectively to the varying needs and preferences of seniors" (Canada Mortgage and Housing Corporation, 1990:15). Moreover, different housing may be appropriate for people at different stages of the life cycle, suggesting that over-regulation for the benefit of one group may restrict the choices available to people in other stages of the life cycle. A continuing debate has developed concerning the distribution and condition of housing stock, the "over housing" of seniors, and their place in the housing market (Golant, 1986; 1994; Greenberg, 1982; Lawton, 1986; Struyk, 1987). In addition, if housing is to be designed specifically for seniors, there has also been much discussion concerning whether it should be age-integrated or segregated at the building level and/or at the neighbourhood scale (Sayegh, 1987).

Many have found that the provision of housing alternatives for the elderly is a problem because of restrictive land use regulations (Golant, 1992a; Hodge, 1990; Laws, 1994; Rossi and Shlay, 1982). For example, "many types of seniors' accommodations fall between traditional zoning categories. Public, non-profit, and private housing providers often find themselves thwarted by the rigamarole of trying to meet development control procedures and regulations" (Hodge, 1990:11). Through

official plans, land development regulations, zoning, subdivision, site planning, and building codes, "a locality can control the types, size, density, arrangement, numbers, physical features, and quality of the housing alternatives it offers" (Golant, 1992a: 287). Moreover, even in cases where appropriate zoning is possible, many of the best sites are not so zoned and development has been effectively blocked by neighbours for a variety of reasons. Opposition comes from old and young alike. In effect, "the distribution of housing and population, therefore, is not simply determined by market forces but in part is influenced by collectively negotiated local political decisions" (Rossi and Shlay, 1982:28). As a result, Golant (1992a) has suggested that there are many possibilities but few choices of housing options for seniors. Somehow planners need to find a way to address these dilemmas, if they are going to meet the needs of seniors. Although land use regulation has often created barriers, there also are a growing number of examples of how it can be used to facilitate or encourage the provision of housing options for older people (Brink, 1986; Energy Pathways Inc., 1995; Howe *et al.*, 1994; Pollak and Gorman, 1989; Shifman, 1983).

In sum, while local movers share many policy issues with those who are aging-in-place, debates concerning housing options are important additions. Longer distance migration further complicates planning for an aging population.

Migration

Researchers have discovered that elderly migration is substantially different from that of younger age groups (Meyer and Speare, 1985; Serow, 1987). The elderly make three basic types of long-distance moves - amenity, assistance, and return migration (Wiseman, 1980). Of the three, the distinct component represented by return migration is more difficult to separate since it often is associated with a need for assistance. Long-distance moves are more likely to occur at the time of

retirement, although there is evidence that some amenity moves are followed by assistance seeking return migration (Longino and Serow, 1992). Elderly migrants tend to be younger, wealthier, healthier, better educated, and more likely to be married than other senior mobility groups (Biggar, 1980).

With migration, policy concerns tend to focus on issues associated with the distribution of the elderly population. As argued by Rosenberg and his associates :

the decline of the elderly population in some areas and its concentration in others have serious implications for the vitality of communities, their vulnerability to policy changes at higher levels of government [through income transfers], and their ability to provide and sustain effective levels of service. (1989:227)

Concentrations of elderly can appear either through amenity migration to retirement communities or through aging-in-place coupled with the out-migration of younger age groups. These patterns create very different types of elderly communities with different policy concerns (Serow, 1992). Moreover, "elderly migration is more 'channelled' than non-elderly migration and may have more serious consequences for service delivery in major receiving and sending [communities]" (Northcott, 1988:102).

Because of the differential selection of migrants in terms of health and economic status, planners are increasingly looking at the economic development potential associated with an affluent retired population (Day and Barlett, 2000; Gnaedinger and McFarlane, 1991; Hodge, 1991b; Laws, 1994; Rowles and Watkins, 1993; Tunnock, 1998; Zon, 1988). While, the magnitude of income and asset transfers associated with elderly in-migration is argued to be a positive stimulus to economic growth (Day and Barlett, 2000; Stallman *et al.*, 1999), little is known concerning the long-term economic and social impact of these migrants as they age-in-place and require an increasing level of community support services (Bryant and El-Attar, 1984; Crown and Longino, 1991; Northcott, 1988; Rose, 1998; Rowles and Watkins, 1993; Serow, 1992; Tunnock, 1998; Zon, 1988). There is

some evidence that elderly long-distance migrants can become more dependent on formal community services than other elderly residents, possibly because of a lack of local familial or social supports (Joseph and Cloutier, 1991). However, a continuing in-migration of the newly retired, could somewhat offset this potential burden (Bryant and El-Attar, 1984; Northcott, 1988). Nevertheless, administrators of retirement communities have expressed a growing dilemma over how to respond to residents who are aging-in-place in a community designed for and marketed to healthy, independently living seniors (Bowers, 1989). On the other hand, with increased longevity more and more of the newly retired are caring for elderly parents, creating a market for retirement communities with accommodations for both generations, such as dwelling units with accessory apartments (Longino, 1992), or with nearby long-term care facilities such as retirement or nursing homes.

An additional concern is that the growing trend of amenity moves to more dispersed less accessible communities, could mean that "migration-induced stresses will overlay and exacerbate long-standing problems of providing services to scattered communities within the context of finite budgets" (Joseph and Cloutier, 1991:443). Moreover, a large influx of retired migrants can challenge the social order in a small community, resulting in conflict between long term residents and in-migrants, a polarized economy of highly paid professions and lower paid service workers, and social fragmentation (Rowles and Watkins, 1993; Tunnock, 1998). Although private and community services can evolve to meet changing needs, success is contingent upon the size and design of retirement communities, available resources, and diligent planning (Bryant and El-Attar, 1984; Rowles and Watson, 1993; Tunnock, 1998; Zon, 1988).

Less attention has been given to the consequences of elderly amenity migration to the community of origin (Serow, 1992). As pointed out by Crown and Longino (1991:201), "regions

that gain income as a result of elderly migrants do so at the expense of other regions". Many of these communities of origin may be both losing their younger relatively well-off elderly through amenity migration, and gaining older more dependent elderly through return migration (Northcott, 1988). As a result they may be carrying the bulk of the burden of caring for the dependent elderly population. Moreover, an increased level of service to meet the demand may in turn attract older people as they lose their capacity for independent living. Such in-migration would also create an increased need for suitable housing and transportation alternatives.

Communities with elderly concentrations due to aging-in-place coupled with the out-migration of younger age groups would have similar concerns, especially if their younger, healthier and wealthier seniors are also leaving. However, since the out-migration of the younger population is sensitive to economic conditions, these communities have the added problem of a local population which ages in fits and starts (Bergob, 1995).

In sum, the differential residential migration of the elderly can lead to localized service demand differences. Often resource allocation is based on numbers, however "while the distribution of gains and losses provides indications of shifts in the *potential* demand for services, the *actual* demand is also a function of the health and mobility of the local population [authors' emphasis]" (Rosenberg *et al.*, 1989:227). Communities with similar concentrations of the elderly may have very different needs. In planning for an aging population, it will become increasingly important to use a finer scale and to recognize local contextual differences.

Summary and Conclusions

The residential mobility choices of the elderly are part of a dynamic system of inter-related issues

associated with housing, transportation, community support services and land use which present planners with a number of dilemmas which are particularly sensitive to local context, both in terms of the issues that arise and their timing. These include issues associated with competing models of care and service delivery, provision of appropriate housing, physically and socially supportive local environments, community development, relocation services, housing specialization and age-integration, the introduction of housing options within neighbourhoods, economic development, social integration and localized differences in demand. As Hodge (1991a:12) has argued, "next to health care professionals, [community] planners probably have the most to offer seniors in maintaining their independence". Local planners need to move beyond estimates of future demand based on expected numbers and present use patterns, recognize that the aging population challenges both the substance and style of local planning (Hodge, 1990; Taylor, 1998), and begin to examine the possible impact of these issues on the integration of an aging population within their communities.

References

- Bergob, Michael J. 1995. Destination preferences and motives of senior and non-senior inter-provincial migration in Canada. *Canadian Studies in Population*. 22 (1) : 31-47.
- Biggar, Jeanne C. 1980. Who moved among the elderly, 1965 to 1970: A comparison of types of older movers. *Research on Aging* 2 (1) : 73-91.
- Bowers, Barbara J. 1989. Continuing care retirement communities' response to residents aging in place: The reluctantly accommodating model. *Journal of Housing for the Elderly* 5 (2) : 65-81.
- Brink, Satya. 1985. Housing elderly people in Canada: Working towards a continuum of housing choices appropriate to their needs. *Innovations in Housing and Living Arrangements for Seniors*. eds. Gloria M. Gutman, and Norman K. Blackie, 1-23. Burnaby, British Columbia: The Gerontology Research Centre, Simon Fraser University.
- Bryant, Ellen S., and Mohamed El-Attar. 1984. Migration and redistribution of the elderly: A challenge to community services. *The Gerontologist*. 24 (6) : 634-640.
- Canada Mortgage and Housing Corporation. 1990. *Strategic Plan 1990-1994*. Ottawa: Canada Housing and Mortgage Corporation.
- Carter, Jack. 1988. Elderly local mobility: An examination of determinants derived from the literature. *Research on Aging*. 10 (3) : 399-419.
- Che-Alford, Janet, and Kathryn Stevenson. 1998. Older Canadians on the move. *Canadian Social Trends*.. Spring: 15-18.
- Connerly, Charles E. 1986 The impact of neighbourhood social relations of prospective mobility. *Social Science Quarterly*. 67 (1) : 186-194.
- Crown, William H., and Charles F. Longino. 1991. State and regional policy implications of elderly mobility. *Journal of Aging and Social Policy*. 3 (1/2) : 185-207.
- Day, Frederick A., and Jon M. Barlett. 2000. Economic impact of retirement migration on the Texas hill country. *The Journal of Applied Gerontology*. 19 (1) : 78-94.
- Dunn, Peter A. 1991. Policies and community responses which promote barrier-free housing for seniors. *Aging into the Twenty-First Century*. ed. Christine Blais, 400-412. Toronto: Captus University Publications.
- Energy Pathways Inc. 1995. *Affordability and Choice Today, Case Study, Policies and Regulations for Seniors Housing*. Ottawa: Canada Mortgage and Housing Corporation.
- Gee, Ellen M., and Susan A. McDaniel. 1994. Social policy for an aging society. *Aging: Canadian Perspectives*. Victor W. Marshall, and Barry D. McPherson, 219-231. Peterborough, Ontario: Broadview Press.
- Gnaedinger, Nancy, and J. T. McFarlane. 1991. *Small Towns as Retirement Communities*. Ottawa: Canada Mortgage and Housing Corporation.

- Golant, Stephen M. 1986. Understanding the diverse housing environments of the elderly. *Environments* 18 (3) : 35-51.
- Golant, Stephen M. 1992a. *Housing America's Elderly: Many Possibilities/Few Choices*. Newbury Park, California: SAGE Publications.
- Golant, Stephen M. 1992b. The suburbanization of the American elderly. *Elderly Migration and Population Redistribution: A Comparative Study*. eds. Andrei Rogers, William H. Frey, Philip Rees, Alden Spear, Jr., and Anthony Warnes, 163-180. London: Belhaven Press.
- Golant, Stephen, M. 1994. Housing quality of U.S. elderly households: Does aging in place matter? *The Gerontologist*. 34 (6) : 803-814.
- Greenberg, Lawrence. 1982. The implications of an ageing population for land-use planning. *Geographical Perspectives on the Elderly*. ed Anthony M. Warnes. 401-425. Chichester: John Wiley and Sons.
- Hayward, Lynda, and Michael Lazarowich. 1998. A resting place. *Plan Canada*. 30 (4) :15-18.
- Hodge, Gerald. 1990. The seniors surge: Why planners should care. *Plan Canada*. 30 (4) : 5-12.
- Hodge, Gerald. 1991a. Canadian community planning 100 years on: Where next? *Plan Canada*. 31 (6) : 9-14.
- Hodge, Gerald. 1991b. The Economic Impact of Retirees on Smaller Communities. *Research on Aging* 13 (1) : 39-54.
- Hodge, Gerald. 1998. Baby bloomers. *Plan Canada*. 30 (4) : 10-11.
- Hodge, Gerald, Laurie McKay, and John B. Collins. 1994. *The Graying of Canadian Suburbs: Patterns, Pace and Prospects*. Ottawa: Canada Mortgage and Housing Corporation.
- Howe, Deborah A., Nancy J. Chapman, and Sharon A. Baggett. 1994. Planning for an Aging Society. Planning Advisory Service report number 451. Chicago: American Planning Association.
- Joseph, Alun E., and Denise S. Cloutier. 1991. Elderly migration and its implications for service provision in rural communities: An Ontario perspective. *Journal of Rural Studies*. 7 (4) : 433-444.
- Joseph, Alun E., and Bonnie C. Hallman. 1996. Caught in the triangle: The influence of home, work and elder location on work-family balance. *Canadian Journal on Aging*. 15 (3) : 393-412.
- Kane, R. L., and R. A. Kane. 1980. Alternatives to institutional care of the elderly: Beyond the dichotomy. *The Gerontologist* 20 (3) : 249.
- Laws, Glenda. 1994. Implications of demographic changes for urban policy and planning. *Urban Geography*. 15 (1) : 90-100.
- Lawton, M. Powell. 1986. *Environment and Aging*. 2nd edition Albany, New York Center for the Study of Aging.
- Leather, Philip, and Sheila MacKintosh. 1993. The long term impact of staying put. *Ageing and Society*. 13

: 193-211.

- Leung, Hok Lin. 1990. *Elderly Homeowners Turned Renters: Reasons for Move*. Ottawa: Canada Mortgage and Housing Corporation.
- Levi, Gloria, and Beryl Petty. 1992. *A new home: Disruptions and new beginnings*. Vancouver: Benwell-Atkins Limited.
- Litwak, Eugene, and Charles F. Longino, Jr. 1987. Migration patterns among the elderly: A developmental perspective. *The Gerontologist* 27 (3) : 266-272.
- Longino, Charles F. Jr. 1992. The forest and the trees: Micro-level considerations in the study of Geographic mobility in old age. *Elderly Migration and Population Redistribution: A Comparative Study*. eds. Andrei Rogers, William W. Frey, Philip Rees, Alden Speare, Jr., and Anthony Warnes, 23-34. London: Belhaven Press.
- Longino, Charles F., Jr., and William J. Serow. 1992. Regional Differences in the Characteristics of Elderly Return Migrants. *Journal of Gerontology: Social Sciences*. 47 (1) : S38-S43
- Marshall, Victor W. 1987. Introduction: Social perspectives on aging. *Aging in Canada: Social Perspectives*. second edition. ed. Victor W. Marshall, 1-7. Markham, Ontario: Fitzhenry & Whiteside.
- McClain, Janet. 1991. Community planning for seniors: Right neighbourhood, wrong vintage. *Plan Canada* 31 (1): 22-29.
- McPherson, Barry D. 1988. Forward to *Changing Residence: The Geographic Mobility of Elderly Canadians*. Herbert C. Northcott. Toronto: Butterworths.
- McPherson, Barry D. 1990. *Aging as a Social Process*. second edition. Toronto: Butterworths.
- Meyer, Judith and Alden Speare, Jr. 1985. Distinctively elderly mobility: Types and determinants. *Economic Geography* 61: 79-88.
- Mish, Janet, and Bruce Rice. 1998. Senior partners. *Plan Canada* 38 (4) : 30-34.
- Moore, E. G., and M. W. Rosenberg. 1993. Migration, mobility, and population redistribution. *The Changing Social Geography of Canadian Cities*. eds. Larry S. Bourne, and David F. Ley, 121-137 Montreal: McGill-Queen's University Press.
- Moore, Eric G., and Mark W. Rosenberg. 1994. Residential mobility and migration among Canada's elderly. *Aging: Canadian Perspectives*. eds. Victor Marshall, and Barry McPherson, 51-69. Peterborough, Ontario: Broadview Press.
- Moore, Eric G., and Mark W. Rosenberg with Donald McGuinness. 1997. *Growing Old in Canada: Demographic and Geographic Perspectives*. Toronto: ITP Nelson.
- Northcott, Herbert C. 1988. *Changing Residence: The Geographic Mobility of Elderly Canadians*. Toronto: Butterworths.
- O'Bryant, Shirley L. 1982. The value of home to older persons: Relationship to housing satisfaction.

- Research on Aging* 4 (3) : 349-363.
- O'Bryant, Shirley L., and Colleen I. Murray. 1986. "Attachment to home" and other factors related to widows' relocation decisions. *Journal of Housing for the Elderly* 4 (1) : 53-72.
- Oldakowski, Raymond K., and Curtis C. Roseman. 1986. The development of migration expectations: Changes throughout the lifecourse. *Journal of Gerontology* 41 (2) : 290-295
- Patrick, Clifford H. 1980. Health and migration of the elderly. *Research on Aging* 2 (2) : 233-241
- Pollak, Patricia Baron, and Alice Nudelman Gorman. 1989. *Community-Based Housing for the Elderly: A Zoning Guide for Planners and Municipal Officials*. Planning Advisory Service report number 420. Chicago: American Planning Association.
- Pynoos, Jon and Victor Regnier. 1997. Design directives in home adaptation. *Staying Put: Adapting the Places Instead of the People*. eds. Susan Lanspery and Joan Hyde, 41-54. Amityville, New York: Baywood Publishing Company, Inc.
- Rittel, Horst W. J., and Melvin M. Webber. 1973. Dilemmas in a general theory of planning. *Policy Sciences* 4 : 155-169.
- Rogers, Andrei. 1988. Age patterns of elderly migration: An international comparison. *Demography* 25 (3) : 355-370.
- Rose, Mary. 1998. Snow Belt. *Plan Canada*. 30 (4) :19-22.
- Rosenberg, Mark W., Eric G. Moore, and Suzanne B. Ball. 1989. Components of change in the spatial distribution of the elderly population in Ontario, 1976-1986. *The Canadian Geographer* 33 (3) : 218-229.
- Rossi, Peter H., and Anne B. Shlay. 1982. Residential mobility and public policy issues: 'Why Families Move' revisited. *Journal of Social Issues* 38 (3) : 21-34.
- Rowles, G. D. 1987. A place to call home. *Handbook of Clinical Gerontology*. eds. Laura L. Carstenson, and Barry A. Edelstein, 335-353. New York: Pergamon Press.
- Rowles, Graham D., and John F. Watkins. 1993. Elderly migration and development in small communities. *Growth and Change*, 24 (Fall): 509-538.
- Rudzitis, Gundars. 1979. Determinants of the central city migration patterns of older persons. *Location and Environment of Elderly Population*. ed. Stephen M. Golant, 55-69. Toronto: John Wiley & Sons.
- Sayegh, Kamal S. 1987. *Housing: A Canadian Perspective*. Ottawa, Ontario: Academy Book.
- Serow, William J. 1987. Determinants of interstate migration: Differences between elderly and nonelderly movers. *Journal of Gerontology* 42 (1) : 95-100.
- Serow, William J. 1992. Unanswered questions and new directions in research on elderly migration: Economic and demographic perspectives. *Journal of Aging and Social Policy* 4 (3/4) : 73-89.
- Shifman, Carole R. 1983. *Increasing Housing Opportunities for the Elderly*. Planning Advisory Service

- report number 381. Chicago: American Planning Association.
- Smith, Geoffrey C. 1998. Residential separation and patterns of interaction between elderly parents and their adult children. *Progress in Human Geography*, 22 (2): 369-384.
- Stallmann, Judith I., Steven C. Deller and Martin Shields. The economic and fiscal impact of aging retirees on a small rural region. *The Gerontologist*. 39 (5) : 599-610.
- Struyk, Raymond J. 1987. The economic behaviour of elderly people in housing markets. *Housing Studies* 2 (4) : 221-236.
- Taber, Merlin A. 1980. Wicked problems. *The Gerontologist* 20 (3) : 247-248.
- Taylor, Susan. 1998. Retirement planning. *Plan Canada*. 30 (4) : 12-14.
- Tunnock, Glen. 1998. Eliot Nest. *Plan Canada*. 30 (4) : 23-26.
- Warnes, Anthony M. 1982. Geographical perspectives on ageing. *Geographical Perspectives on the Elderly*. ed. Anthony M. Warnes, 1-31. Chichester: John Wiley and Sons.
- Wheeler, R. 1982. Staying put: A new development in policy? *Aging and Society* 2 (3) : 299-329.
- Wiseman, Robert F. 1980. Why older people move: Theoretical issues. *Research on Aging* 2 (2) : 141-154
- Wiseman, Robert F., and Curtis C. Roseman. 1979. A typology of elderly migration based on the decision making process. *Economic Geography* 55 : 324-337.
- Wiseman, Robert F., and Mark Virden. 1977. Spatial and social dimensions of intraurban elderly migration. *Economic Geography* 53 (1) : 1-13.
- Yeates, Maurice. 1978. The future urban requirements of Canada's elderly. *Plan Canada* 18 (2) : 88-104.
- Yee, William, and Maurice D. Van Arsdol, Jr. 1977. Residential mobility, age, and the life cycle. *Journal of Gerontology* 32 (2) : 211-221.
- Zon, Judy. 1988. Planning for retirement communities. *Housing the Very Old*. Ed. Gloria M. Gutman and Norman K. Blackie, 173-183. Vancouver: The Gerontology Research Centre, Simon Fraser University.

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