Chapter 3

Relocation in the Context of Migration Theory

3. Relocation in the Context of Migration Theory

This chapter will explore migration theory and present a framework for understanding the process of residential mobility, especially among public housing tenants. Guiding each individual case of residential mobility, households make decisions about when, why, and where to relocate. These decisions can be understood and predicted using models of residential mobility decision-making. Residential mobility decision-making is presented in this chapter as a process of assessing and assembling a desirable 'bundle' of residential characteristics. A survey of the literature in section four describes the residential bundle concept and it's composition by individuals. Section five investigates a specific type of residential mobility, forced residential relocation, with a focus on forced residential mobility for public housing tenants. In understanding the residential mobility of public housing relocation with the aim of applying this information to improve outcomes for individual tenants.

Public tenant residential mobility and the associated motivations and choices made by relocating public tenants is under-researched and its character and effects largely unknown (Wulff and Newton, 1996, p. 277). There are two main reasons for this gap. First, an assumption has existed that public tenants do not exhibit <u>choice</u> in their mobility (Kintrea and Clapham, 1986), and because the concept of choice is central to mobility research, the residents of public housing are often excluded. Public tenant mobility is regarded centrally as a process of <u>placement</u>, revealing more about the policies of government and the availability of public housing, than about the behaviour of the tenant population itself. The residential mobility of public tenants is seen as being formed by the constraints placed upon tenants in the form of housing authority decisions and policy. However, while there are constraints upon the timing, circumstances and location of moves, the entry into, and subsequent movement within, the public housing sector, involves tenant choice (Wulff and Newton, 1996, p.282). Even with reduced or constrained choice, the investigation of public tenant mobility is a research area deserving attention. Public housing tenants are a largely and

increasingly marginalised group with the move towards public housing as welfare housing in Australia (Maher *et al.*, 1992; Paris *et al.*, 1982). The residential environment is important in shaping the wellbeing of public tenants, and an understanding of how to increase the amount of wellbeing for this group is of increasing importance. The second reason for an absence of mobility research on public tenant populations, especially in Australia, is related to the historical fact that since the 1950s and 1960s tenants have had very low levels of mobility (ABS, 1998, cat no. 2035.0) because of a promise of security of tenure (Wulff and Newton, 1996, p.1). As has been shown in Chapter One, this security has been much reduced, and public tenants are becoming increasingly residentially mobile through forced and induced relocation, as well as other factors.

3.1. Migration and Mobility

Migration, the "movement of people from one location to another" (DeJong, 1994, p.2) over varying distance through physical space is widely associated with a change of permanent place of residence. The scale of movement ranges from intraurban residential mobility to long distance migration occurring over administrative boundaries. Migration is a broad concept that can be conceived along this distance continuum, with varying characteristics depending on the distance moved. International migration, at one end, is the "movement of people from one country to another in order to take up employment or establish residence, or to seek refuge from persecution" (IOM, 1995, p. 3). This type of movement causes significant displacement from the social, economic, and physical landscape, causing many household ties to be broken. Intra-urban, or residential, mobility at the other end of the continuum, describes the shorter distance movement of individuals and households within an urban area, from one residential address to another. Intra-urban mobility results in the partial displacement of individuals from one social, economic, and physical landscape to another. Most often this type of movement allows household ties and linkages to be maintained and the household to stay within the same local labour market (Rossi, 1955; Clark and Dieleman 1996, Roseman, 1971). At the

individual level, even though intra-urban mobility causes less displacement than international migration, it is the most common type of mobility (Hassan *et al.*, 1996), and, "one of the most important forces underlying changes in urban areas" (Rossi, 1980, p. 54; also Maher *et al.*, 1992). In Australia for example, 66 per cent of all mobility occurred within the same state (Bell and Hugo, 2000, p. 22). Intra-urban mobility can very rapidly alter patterns of settlement, and the profile of populations, within cities (Clark, 1982, p.8). Individuals and whole communities in both the location departed as well as the place of relocation are affected by intra-urban mobility. These effects, experienced by movers as well as non-movers, are manifest in changes to the employment market, the housing market, and the provision of infrastructure (Bell and Hugo, 2000, p.16). Intra-urban residential mobility is the primary focus of this chapter.

The terms migration and mobility tend to be used interchangeably in the literature, but there is a difference. At the most general level migration describes a process of residential displacement, from one location to another. When applied to a distance-based typology of migration, the meaning of migration is refined. Here, migration signifies the displacement of a longer distance move. This move separates the mover from their daily pre-move social and economic activities. The term mobility highlights the ability to move residentially and remain largely within the same social, economic, and physical landscape. Moves for mobility are more likely to be related to housing and lifecycle reasons rather than migratory moves which are often motivated by economic reasons (Clark, 1982). This distinction will be used in this chapter.

Mobility studies examine and explore the mobility behaviour of individuals and households. From the micro-behavioural perspective, this research began by attempting to distil mobility behaviour to a single explanation, this evolved to a focus on the process of individual decision making, and then to an evaluation of the role of choice, and the choices available in the mobility process (Emmi and Magnusson, 1995, p. 20). The following section shall follow that structure.

3.2. Explaining Mobility

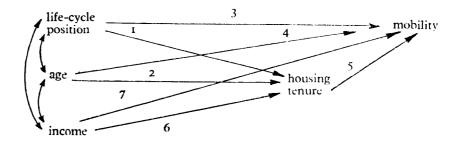
A widely used approach to describe mobility over the last five decades has been the Human Capital approach. This approach "considers migration as the result of rational decision making and a utility maximisation process" (Ritsila and Ovaskainen, 2001, p. 1). In this approach, a potential mover calculates the future costs and benefits of living in specific geographical areas, including the current location, and if another area is beneficial enough to outweigh the costs of moving, they relocate (Cooke and Bailey, 1996; Lee and Roseman, 1999). These decisions are made on the basis of perceived outcomes, at the individual (Sjaastad, 1962) or household level (Starke and Bloom, 1985). Based upon this cost/benefit approach, three main conceptual foci to explain mobility have been proposed: mobility to maximise employment and income, to maximise access to services, and to match housing consumption to household stage and structure.

Within a neo-classical economic framework, mobility is described principally as This was first presented by Sjaastad who regarded mobility labour movement. decisions as "investment choices that maximise various aspects of economic wellbeing" (in Lee and Roseman, 1999, p. 2). This understanding of mobility isolates employment and income as the central reasons for mobility behaviour (DeJong, 1994). Contrasting with this economic-based explanation for understanding mobility behaviour is the framework arising from the work of Tiebout (1956), a local services framework. Tiebout hypothesised that mobility decisions to relocate to particular parts of the urban area are based upon the preference for one particular package of local services over another (Lee and Roseman, 1999; Rohde and Strumpf, 2000). Movers relocate to maximise the services that they have access to. A third framework follows the work of Rossi (1955) who focussed on the importance of lifecycle stage. Rossi suggested that residential mobility is a "process by which families adjust their housing to the housing needs that are generated by the shifts in family composition that accompany life cycle changes" (Rossi, 1955, p. 61). The lifecycle stage framework proposes that mobility decisions are largely the result of changing housing needs which are related to the life-course stage of the household as it moves through a progression

from home making to child bearing to child rearing to child launching to the post child stage (Pickvance, 1973, p.281). The model proposes that, as households evolve along their life-course, at each stage specific housing decisions can be predicted. This means that at each stage of a household's life and composition, it's economic, employment, and social position change, and this triggers different housing needs and motivates specific patterns of housing mobility. These are seen by the majority of researchers to be the central motivating forces behind residential mobility (Golledge & Stimson, 1997; Rossi, 1980; Pickvance, 1973; Clark and Van Lierop, 1987; Dokmeci and Berkoz, 2000; Stimson, 1982; Earhart and Weber, 1996; Kendig, 1984).

These three approaches, while useful at the conceptual level, are focussed upon simplifying the mobility process to a very generalised level. As a result, they mask much of the detail of mobility. An early attempt to broaden the conceptual approach to mobility is the work of Pickvance (1973). Pickvance found that Rossi's lifecycle stage model explained 65-70 per cent of intra-urban residential mobility behaviour. His research expanded upon the lifecycle model, developing a causal model (depicted in Figure 3.1), which linked mobility to an additional three elements: age, income, and importantly, housing tenure. Housing tenure is the key to this model. Lifecycle, age and income all affect mobility behaviour directly, and indirectly, through housing Lifecycle position, age, and income all share positive relationships with tenure. housing tenure, that is with advancing lifecycle stage, age, and income, there tends to be an increase in home ownership levels, this affects mobility behaviour as households relocate to secure housing that better meets their needs. There is one corollary, that at latter lifecycle stages and ages, there is a slight turn away from home ownership to renting. Life-cycle position, age and income also affect mobility behaviour directly, independent of tenure for the reasons described above.





Source: Pickvance, 1973.

A second causal model of mobility behaviour has been presented by Earhart and Weber (1996). This model incorporates the concepts of attachment to home and residential satisfaction to an understanding of mobility intentions. Age, dwelling satisfaction and neighbourhood satisfaction are shown in this model to be three central mobility predictors. This finding is important to this thesis, because of the focus upon residential satisfaction that it brings to an understanding of mobility. Mobility occurs when a logical calculation is made by the mover, that their residential satisfaction would be higher in another residence. Residential satisfaction works to prevent mobility; if a household assesses their satisfaction to be high; they are unlikely to intend to move. This only works where there is some level of freedom in the mobility decision, but it is still useful for this study of forced residential relocation, because residential satisfaction is proven to be important for the composition of the tenant residential bundle.

3.2.1. Explaining Public Tenant Mobility

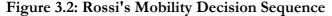
The residential mobility of public housing tenants can be viewed from within the human capital framework. For the purposes of mobility research, tenants should be regarded as movers primarily, and public tenants secondarily. Though highly constrained, public tenants still attempt to maximise their utility, seeking housing that best meets their needs and provides residential satisfaction to them. Public tenant mobility can be predicted by lifecycle stage and the related characteristic of age (Wulff and Newton, 1996; Kendig, 1984), but is less influenced by employment and income than is the case for the wider population (Kintrea and Clapham, 1986; Fuller, 1995; Wulff and Newton, 1996) because they are much less likely to be participants in employment, and rents in the public sector tend to be controlled. What makes public tenant mobility distinct from that of homeowners and purchasers, and renters in the private sector, is the additional predictors of force and constraint. While a model to predict public tenant mobility is almost identical to the models reviewed above, it must also take into account a large number of forced moves and higher levels of constraint in the decision making process.

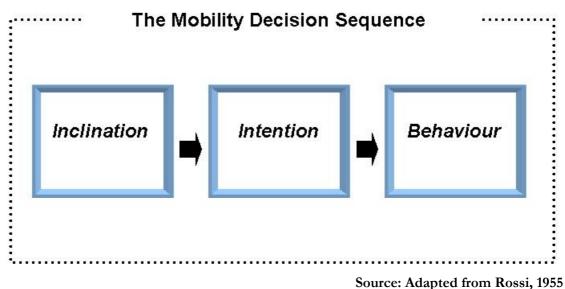
3.2.2. Summing up Mobility

What can be taken from this review is an understanding of residential mobility, regardless of tenure, as a rational decision-making process of utility maximisation. Individuals make relatively predictable mobility decisions, led by characteristics such as their lifecycle stage, income and employment situation, and housing tenure, as well as their perception of the level to which their residential situation meets their needs. It is from this conception of mobility that this thesis comes. The SDSS developed in this research seeks to assist in mobility decision-making by increasing the information provided to the individual mover and their household, assisting them to make rational relocation decisions. The following section explains the mobility decision-making process, using Rossi's seminal model as a framework.

3.3. Mobility Decision Making

Rossi's "Why Families Move" (1955), defined a structure for understanding the migration behaviour of households and individuals as a rational decision process (McHugh, 1984; DeJong, 1994). This decision process has three stages, beginning with a desire to move (inclination), followed by a migration intention (intention), culminating in actual residential relocation (behaviour). The model is summarised in Figure 3.2.





The inclination phase, DeJong (1994) described as a 'choice behaviour', it is the result of "deliberations over an extended period of time, implying a careful weighing of pros and cons" (p. 9). For inclination to develop, choice must be available, migration should be perceived to produce positive outcomes, and there must be enough money, information, and the social network contacts to allow the move to take place. The desire to move can be long held, and will not necessarily progress immediately to an intention to move. This phase is closely related to lifecycle stage (McHugh, 1984). The intention phase of the decision model represents a solidification of inclination into intent. Intention is motivated by a collection of stimuli, such as lifecycle stage (for example, marriage, divorce and death); the desire for increased residential satisfaction; or the meeting of goals, such as career advancement (for example McHugh, 1984; Green, 1997). These factors differ from underlying mobility factors, such as age and lifecycle stage. The intention phase includes decisions about where to relocate and what type of housing is suitable. Mobility behaviour is the action that follows an intention to move. This behaviour includes decisions about the search for new housing, and the actual relocation of the household.

Mobility decisions are sophisticated equations of choice and constraint, and very few are entirely free from restriction (Maher, 1994). Significant and varying restraints are placed upon households' migration decisions such as wealth, time, knowledge, family structure, or plans for the future. They are a compromise between needs and desires, and obligations and wealth. The level of decision making available to households is also shaped by the underlying causes of mobility. Decision-makers who have high levels of mobility choice are able to minimise the cost of housing change, locate housing that best meets their needs, and secure a residential environment with maximum amenity. Decision makers with limited choice are less able to. A mobility motivation typology, as first described by Clark and Onaka (1983) develops this idea, classifying moves as, Adjustment, Induced, or Forced, by the level of decision-making freedom involved.

Adjustment moves are voluntary, motivated by a desire for change in the characteristics of housing consumed- the dwelling, the residential environment, or accessibility to surrounding goods, services, and social networks. These moves allow the household to respond to a mismatch between "their perceived needs and that supplied by the current set provided at that location" (Maher *et al.*, 1992, p. 23). Adjustment moves are discretionary, that is, they are calculated to improve housing outcomes for movers who possess high levels of choice.

Induced moves are moves that become necessary because of other decisions made by the individual or the household, or events they have been involved with. Effectively, in this case, relocation is a consequence of economic and life cycle–based decisions of movers. Induced mobility is a middle ground, where relocation becomes increasingly attractive because of household events, but is not essential, as is the case with forced movement. The causes of induced mobility are most likely to be lifecyclerelated, for example accompanying household formation, dissolution, or other structural change.

Forced moves are made as a result of influences that movers have no control over, or choice about. There is a strong relationship between forced movement and tenure. Renters, both public and private make up the majority of forced movers. This is a reflection of the instability of their housing contract, the low capital value of much rented housing, as well as the characteristics that often prevent renters from owning housing - such as economic and physical hardship, and youth.

These three types of move are summarised in Figure 3.3 below. This figure builds upon Clark and Onaka's model (1983), highlighting the influence of choice upon mobility.

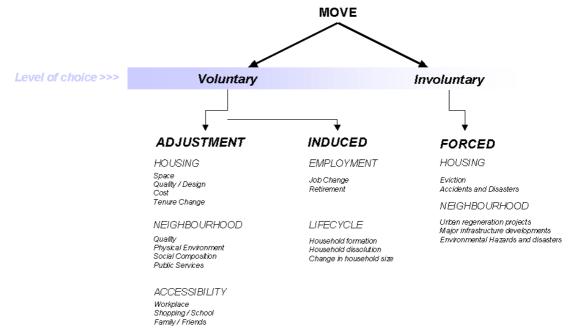


Figure 3.3: Classification of Types of Residential Move with underlying Reasons for Relocation

Source: Adapted from Clark and Onaka, 1983, p. 50

The classification shown in this figure is particularly useful because it highlights motivation as a differentiating factor between the three types of move. Adjustment moves here are related to maximising the positive aspects of the residential situation, such as neighbourhood quality and access to family and friends. These are mainly pull factors. The opposite end of the choice continuum, forced relocation is dominated by push factors.

Combining the model adapted from Clark and Onaka (1983) with that of Rossi (1955; 1980) (Figure 3.2), the entry points to the decision making process are shown to be heavily reliant on the level of choice available in the move. In this way, moves motivated by adjustment, inducement, and force enter the decision making process at inclination, intention, and behaviour respectively, and therefore have very different levels of decision-making and choice available.

3.3.1. Mobility Decision Making for Public Tenants

The mobility decision-making process for public tenants is constrained. It is possible for tenants to progress through Rossi's entire mobility decision sequence from inclination through intention, to behaviour, but tenants often experience constraint, for example, in finding available public housing or spending time on waiting lists. They often have a limited level of choice available. Tenants do exhibit choice and move voluntarily, and this movement tends to conform to Rossi's lifecycle framework. Wulff and Newton's (1996) study of 1991 Australian Census data found that 18 per cent of public tenant moves were motivated by a desire for improved dwelling size and quality. The same survey found that 15 per cent of moves were motivated by a related desire for dwellings that better met the needs of disability or health in the household. Kintrea and Clapham's (1986) study of Glasgow also found choice to be present in public tenant relocation decision making, and again found housing factors related to lifecycle change, such as marriage and old age, to be central. The following table (3.1) lists results of a survey of household reasons for moving, comparing public sector residents with those of the private sector. While there are similarities, the differences are notable, especially with regard to the types of choice available.

Though public tenant mobility can be viewed within Rossi's lifecycle framework, the usefulness of this model is limited by the low levels of choice that public tenants have. The overwhelming finding in each study of public tenant mobility is the significant effect of constraint. Public tenants have many more constraints acting upon their mobility decision process than those in the private sector (Kintrea and Clapham, 1986). This constraint is well documented (for example Wulff and Newton, 1996; Bird, 1976; Kintrea and Clapham, 1986) and virtually implicit within public housing. The constraints acting upon tenants can be understood as either structural or individual, or both.

Main reason for moving	Public	Private
	sector %	sector %
Personal reasons		
Got married	6	12
Change in family size	5	4
Marital breakdown	7	3
Ill health or old age	10	0
To be nearer relatives or friends	3	1
Change in income	0	4
Wanted financial benefits	Na	9
Employment reasons		
To be nearer job	1.4	1.6
Changed job	0.3	5
Other work reason	0.3	0
Property reasons		
Wanted different size of house	13	14
To stop sharing	11	3
Wanted different type of dwelling	5	3
Obtain a garage or garden	0	1
Neighbourhood reasons		
Get away from neighbours	5	2
Move to a better neighbourhood	5	2
To be nearer amenities	1	2
Forced moves		
Evicted	2	2
Clearance and compulsory purchase	8	0
Other forced moves	11	Na
Family dispute	3	Na
Other		
Wanted to buy house	Na	26
Other	1	4
	N=641	N=188

Table 3.1: Survey of Reasons for Moving given by Households

Source: Munro and Lamont, in Kintrea and Clapham, 1986, p. 1285

Structurally, the number of publicly owned dwellings in Australia is far less than the number of households desiring them. This means that because demand is so much greater than supply, it is difficult to enter the sector and also difficult to voluntarily relocate within it. Over and above the shortage of housing, tenants are often given limited power to request their own transfer (such as documented by Bird, 1976). Related to the institutional nature of public housing, tenant moves are also constrained by a lack of information about alternate housing. The housing authority is fulfilling its basic role of housing provision to the individual tenant whether they are residing in the current dwelling or voluntarily relocated to another, therefore, there is little gain for housing authorities in promoting voluntary relocation through information about housing alternatives within their housing stock. In addition, in times of funding restrictions, it would likely be considered wasteful to expend the limited housing authority resources on promoting voluntary relocation within the stock.

Public housing infrastructure also tends to be spatially concentrated, this means that tenants relocating from public rental to public rental are much more likely to be constrained within the local area. Wulff and Newton (1996, p. 294) point to the way that Housing Authorities administer their stock as a reason for this, an assertion that is supported by findings in the current research. In South Australia, relocations tend to occur within the fourteen South Australian Housing Trust regions because each is administered separately and relocations across regions are more administratively difficult to execute. This means that public tenant relocations in Adelaide are very much more likely to occur intra-regionally over shorter distances.

Individual constraint also acts upon tenant household mobility decisions. Tenant households are constrained individually by the social, economic, and employment characteristics that they possess. These constraints act to reduce the level of utility that they can command from their housing. As an example of this, included in a tenant's rational mobility calculation is the constraint of potential time to be spent on waiting lists. Tenants weigh up the probable amount of time they will spend waiting to relocate to their ideal residential location against a shorter time spent waiting for a less than ideal location. If other needs mean that they cannot wait, then they compromise their residential wellbeing. The most basic constraint acting upon public tenants is probably related to income. This prevents them from searching for more suitable housing in other tenures, and in Australia at least, means that they must compete for a share of welfare housing. Income also limits the appeal of voluntary mobility because of the additional cost involved in relocation and establishment in a new dwelling. The relative dissatisfaction with the current residential situation is a further constraint, if the current living situation is not ideal, but better than the available options, then tenants will likely choose not to move.

The choices and constraints public tenants experience shape their residential mobility behaviour and the outcomes of that behaviour. The relative level of choice and constraint available to public tenants is illustrated by the example of tenant movement patterns. Public tenants have been shown in many studies (ABS, 1999, cat no. 4182.0; Kintrea and Clapham, 1986; Wulff and Newton, 1996; Mason, 1999-2000; Bird, 1976) to express choice for shorter distance movements. In Bird's (1976) study of Newcastle and Greater London, at least half of tenants chose moves of less than two kilometres, and very few selected moves of greater than five kilometres. In Kintrea and Clapham's Glasgow study (1986) more than 81 per cent of moving tenants requested moves of less than three kilometres, and over half requested a move of less than one kilometre. In two recent studies of relocating tenants from The Parks area in North Western Adelaide, 56 per cent and 72 per cent of tenants requested moves of less than 3km (SAHT 1999a, Mason, 1999-2000)⁵. This finding is mirrored in the latest Australian Housing Survey (ABS, 1999, cat no. 4182.0). Public tenants are likely to choose nearby neighbourhoods because they are familiar and allow maintenance of existing social networks and employment opportunities. Along with this choice of nearby locations, there is evidence of constraint. When the distance from the relocation dwelling is compared with the pre-move address, the selected address, and that of the first offer (Kintrea and Clapham, 1986) the requested location is found to be close (mean distance 1.7km), the relocation address furthest (mean 2.2km), and the distance to the first offer is slightly smaller (mean 2.18km). This points to tenants choosing nearby locations, and receiving locations further away. The reason for the mean distance to the relocation address being slightly more than that to the first offer is probably related to other choice factors that caused the dwelling to be rejected, such as poor condition or threatening local environment. Kendig's study of movement into public housing in South Australia found that tenants had moved on average, twelve kilometres to obtain a public dwelling (Kendig, 1981, p.62). When Kintrea and Clapham investigated the reasons given for longer moves, they found them largely to be related to constraint. In the situation of marital breakdown, dispute, or eviction,

⁵ The probable reason for the higher concentration of requested moves in the Glasgow study is the much higher concentration of public housing accommodation in Britain

households nominated a preference for short distance mobility but tended to move further. This was because tenants in this situation were forced to accept accommodation more quickly, and therefore moved further away. This is interesting because it shows tenant preference is generally for shorter relocation moves, but the force and constraint can act to lengthen the distance moved.

A notable element in the public tenant mobility decision process is force. The dominance of forced (Clark and Onaka, 1983) movement, or induced movement (Rossi, 1955), among public tenants is well documented (Wulff and Newton, 1996; Kintrea and Clapham, 1986). This phenomenon of forced moves is increasingly relevant to public housing tenants. Reflecting again on table 3.1, this dominance also occurs in the UK where Kintrea and Chapman found that 25 per cent of public housing moves were forced, compared to 2 per cent in the private rental market. This will be further examined in Chapter Five using 1996 Australian Census data. The study population in the current research are a good example; they are public housing tenants being relocated for urban regeneration. They are excluded from inclination and intention to move, entering the decision making process at behaviour. Their movement is not free, it is not motivated by the tenants desire to improve their wellbeing, and does not entail a rational calculation of the relative utility of a move.

3.4. The Residential Bundle Framework

Rossi (1955) suggested that residential mobility was a process of two phases; firstly the decision to move, which has been explored above, and second, the selection of housing which is the focus of this section. The search for housing is best conceived using the concept of a 'residential bundle'. A residential bundle describes the housing and residential environment that a household commands. Moves are made to maximise the components of this bundle in relation to household needs, within the constraints they have imposed upon them. This can be visualised as an equation of pushes and pulls, choices and constraints, or attractors and attracted, as has been done throughout the behavioural literature (for example, Longino, 2001; Böheim and Taylor, 1999; McHugh, 1984; Clarke and Onaka, 1983; Golledge and Stimson, 1997). Following is a discussion of the components of the bundle preceding a description of the main theoretical conceptions of bundle composition and an analysis of public housing tenant residential bundle formation.

3.4.1. Components of The Residential Bundle.

A household residential bundle describes the collection of residential elements each household seeks and gathers. The bundle is constructed from the housing, environmental, accessibility, employment, and social elements that a residence provides. This is presented in Figure 3.4. Individuals and their households seek residential satisfaction by attempting to compose the best residential bundle they can access. As discussed above, a household's ability to select these components is somewhat constrained and directed by their attributes, such as history, economic position and lifecycle stage; this is shown as a filter surrounding the bundle. Individuals and households compose their residential bundle differently. A survey of the literature shows the breadth of housing bundle components that have been shown to be significant in previous research. This is summarised in table 3.2. Because of the very personal nature of residential location decisions, this list is obviously not exhaustive, but it highlights the important components of residential bundle formation across study populations. There is also a commonality of residential elements selected by households as important in multiple survey results, this points to the predictive ability that the residential bundle concept permits. This topic will be detailed in Chapter Four, which explores the nature of residential satisfaction, and the residential elements that support it.

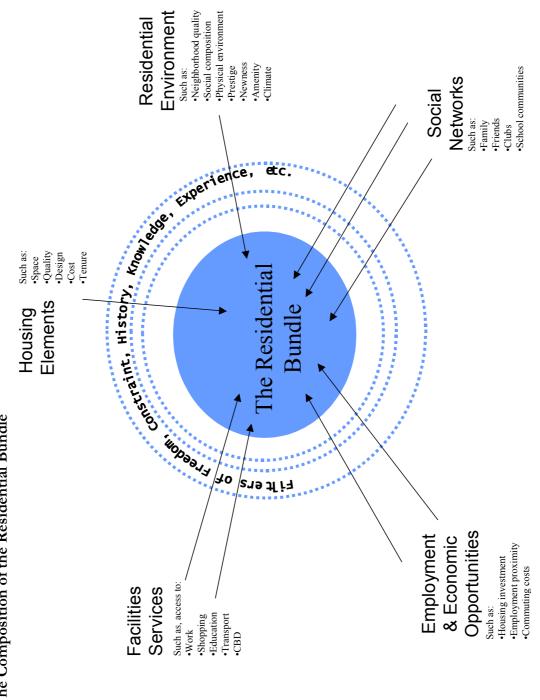




Table 3.2: Summary of Re	Table 3.2: Summary of Residential Bundle Components	nts		
The Residential Environment	Housing Elements	Facilities and Services	Employment and Economic Opportunities	Social Networks
Amenity (Golledge & Stimson, 1997; Arora et al., 2000; Longino, 2001) Semi-rural amenity (Green, 1997)	"Existence and appropriate housing" (Golledge and Stimson, 1997)	Accessibility to work (Green, 1997; Clark and Onaka, 1983; Böheim & Taylor, 1999; Pickvance, 1973	Maximise economic wellbeing and potential (Lee and Roseman, 1999; Golledge and Stimson, 1997)	Social Networks (DeJong, 1994; Golledge and Stimson, 1997; Longino, 2001
Climate (Longino, 2001; Lee and Roseman, 1999)	Property ownership (McHugh, 1984; Pickvance, 1973)	Accessibility to transport routes (Green, 1997; Stimson, 1978) Costs of commuting (Böheim & Taylor, 1999)	Higher income employment (Wall, 1999; Cooke and Bailey, 1996;	Accessibility to family and friends (Clark and Onaka, 1983; DeJong, 1994; 2000)
Ties to Place, "life history" (McHugh, 1984)	To increase or decrease housing space (Clark and Onaka, 1983; Rossi, 1980; Stimson, 1978; Kintrea and Clapham, 1986)	Accessibility to good schools (Green, 1997; Pickvance, 1973) Educational quality or opportunity (Bogue, 1969)	Close to suitable employment (Green, 1997; Lee and Roseman, 1999; McHugh, 1984; Böheim & Taylor, 1999; Bogue, 1969)	Presence of friends and relatives (McHugh, 1984; Owusu, 1999)
Social and Physical Activities available (Bogue, 1969) Recreation Potential (Golledge and Stimson, 1997)	Housing quality / design (Clark and Onaka, 1983)	Accessibility to services (Golledge and Stimson, 1997)	Costs of commuting (Böheim & Taylor, 1999)	Near members of same ethnic group (Owusu, 1999)
Public Services (Tiebout, 1956; Rohde and Strumpf, 2000; Lee and Roseman, 1999)	Housing costs (Clark and Onaka, 1983)	Accessibility to the CBD (Stimson, 1978)	To escape unemployment (Böheim and Taylor, 1999)	
Area of low crime (Lee and Roseman, 1999;				
Topographic structures and water bodies (Golledge and Stimson, 1997)				
Better neighbourhood (Clark and Onaka, 1983; Kintrea and Clapham, 1986)				

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Elements of the residential environment are highly important in the selection of the residential bundle. Positively perceived attributes of the residential environment are sought by movers for incorporation into their residential bundle. The amenity of the area describes much of this positive perception, which is, the appearance, the lifestyle it permits, the climate, the safety, the social composition, any positively perceived attribute of an area's environment. Housing elements are another important group of components to the residential bundle (Golledge & Stimson, 1997; Böheim & Taylor, 1999). Most important among the housing elements is consistently shown to be house size (Clark and Onaka, 1983; Rossi, 1980; Stimson, 1978; Kintrea and Clapham, 1986), which reflects the close association between housing elements as a reflection of lifecycle stage requirements, principally, marriage, divorce, and childbearing (Rossi, 1980; Stimson 1978; Clarke & Onaka, 1983). Social networks (for example DeJong, 1994; McHugh, 1984; Longino, 2001; Bird, 1976) are highly important components of the residential bundle. McHugh (1994, p. 319) gives this element primacy stating, "friends or relatives are clearly the most prevalent tie to a potential destination". This is not simply for reasons of proximity to social networks; they also provide important information about the area, as well as familiarity through visits and local descriptions (DeJong, 1994). Accessibility to specific facilities and services is an important consideration for the formation of the residential bundle (Clark & Onaka, 1983). Local services and infrastructure, especially good schools (Green, 1997) are often restricted to the residents of proximal areas, so not only is there a saving in the cost of transport, but proximity makes them available. Employment, as shown above is a most important mobility component for researchers working from a neoclassical economic perspective, and there are a number of studies which find employment and income maximisation components of the residential bundle to be the most important (for example, Lee & Roseman, 1999; Wall, 1999; Cooke and Bailey, 1996; Böheim and Taylor, 1999).

3.4.2. Composition of The Residential Bundle

Approaches to the composition of the residential bundle involve most simply, rational choices within constraint. These choices are made by the individual in an effort to maximise utility. The way that these choices are made is best described using the random utility model. Random utility assumes that individual decision makers, when faced with a set of alternatives, make their choices based on an "unobservable utility value... associated with the choice of each alternative by each individual" (Emmi and Magnusson, 1995, p. 20). Following is an examination of the two major models of the way that individuals assess and compose their residential bundles.

3.4.2.1. The push-pull model

The push-pull model describes the way each household assesses and then seeks to assemble the components of their residential bundle. Push factors are those that reduce the level of residential satisfaction at the point of origin (Lee, 1978), they are factors that have a "negative influence on quality of life" (Golledge & Stimson, 1997, p. 439). Pull factors on the other hand, are the elements of a residential environment that draw migrants to a destination. The push-pull model is not a simple dichotomy, push factors are often also pull factors for different households, and vice versa. Pushpull factors can be active or passive, for example, eviction is an obvious active push, but more subtle factors such as poor local high school completion rates can act passively to deter families from relocating to an area. Figure 3.5 provides a summary of some of the major push and pull factors.

The push-pull model (Golledge & Stimson, 1997; Lee, 1978; Bogue, 1969) works at an individual or household level, which means that each assessment of push and pull and its strength is different. Each household will have a different existing housing situation and different needs, and hence each push-pull calculation will be different. The model is a useful way of conceiving mobility decision-making and, as many studies have shown, there is a distinct pattern of common pulls, pushes, and weights given by migrating households. Though mobility occurs because of pull and push forces, Maher and Stimson (1994) suggest that moves made from a dominance of

pull factors could be more permanent than those made from a dominance of push factors. Much of this would be because there is a decreased level of control in the move when it is made from push factors, the move could be more hasty, and there would be less to tie a household to their place of relocation. This supports findings in Kintrea and Clapham's 1986 study of public tenant residential mobility in Glasgow where moves, such as those made for the separation of a marriage or eviction, are made much more quickly, often by accepting the first offer of new accommodation. These moves are likely to meet fewer of the requirements of an adequate residential bundle, and therefore create less residential satisfaction and potentially be less permanent.

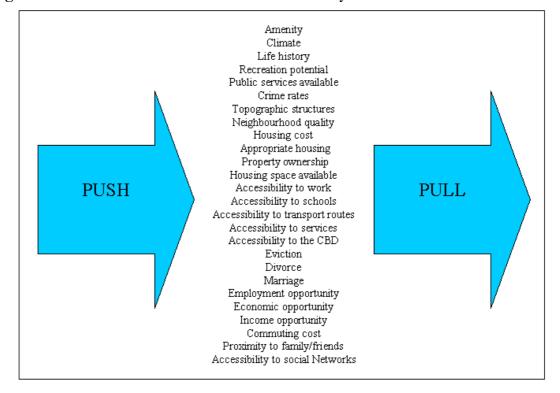


Figure 3.5: Push-Pull Factors in Residential Mobility

3.4.2.2. Attractors and Attracted

A useful refinement of the push-pull model for conceiving the way households compose their residential bundle is the model of 'attractors and attracted' proposed by Maher and Stimson (1994). This model works on various levels of migration distance and varies depending on that distance. The basis of the model is that physical spaces have characteristics (attractors) that attract migration, and that households make relocation decisions and are attracted to these places in varying degrees. The attracted households fall into three groups:

- Those that lead movement and seek out improvements, change, or opportunity (initiators). These are adjustment moves.
- Those that move to better align their household situation with their housing needs (reactors). These are induced moves.
- Those that are forced (involuntary movers). Forced moves.

Initiators seek out new locations voluntarily, led by pull factors in an effort to maximise their housing bundle. Reactor households move because of push and pull forces, but the forces of pull are stronger allowing increased decision-making power. Households moving for lifecycle reasons fall into this category, for example those moving to have more room for children, are to some extent pushed because of a shortage of space, but have the ability to choose another housing situation. Involuntary movers have little control over when or where they move, consequently, push factors are dominant in their decision. Golledge and Stimson (1997, p.444) describe this group as comprising of "those with little economic power, those not in the labour force, or those in the lower socio-economic status areas of work. Many are dependent on pensions or benefits; and for many, their housing tenure is insecure. There are still attractors for this group, but the attractions are frequently the existence of low housing costs, sought by family groups in poor economic circumstances"

Attractors are elements or characteristics of a location that act to pull households towards them. Each level of migration (classified by distance moved) will have a different effect of attraction. They work not only to pull migrants in, but also to keep existing residents there. Attractors include the physical and social knowledge about an area, levels of accessibility, and the lifestyle made possible in the relocation area. Features of the physical environment are sought by many movers, but not usually seen as essential. These include amenity, recreation potential, and the structure of the landscape, especially water bodies. Human made features, act in addition to physical features, they can be regarded as either economic or 'socio-cultural'. Economic attractors are commonly regarded as "one of the most potent forces that attracts population from one location to another" (Golledge & Stimson, 1997, p. 441; also Green, 1997; Lee and Roseman, 1999; McHugh, 1984; Böheim & Taylor, 1999; Bogue, 1969), but this potency is of decreasing importance with shorter moves, such as intraurban residential mobility. In the case of residential mobility, economic factors are important, but less powerful than other factors because residential mobility does not tend to cause total displacement from the pre-move economic landscape, especially in the smaller metropolitan areas of Australia. Socio-cultural features such as infrastructure and good quality services are important attractors, as are social network elements such as social ties, social cohesion, and familial ties. Related to this is the concept of information flow (this is particularly important with regard to the study group examined in this thesis) a great attractor is knowledge of an area, and very often, this knowledge comes from personal and acquaintances' experiences. This knowledge enables movers to relocate to an area they have familiarity with, having explored it previously. Accessibility is another attractor, for example to schools, work, and services. "Other things being equal, accessible locations tend to be more desirable than those with poor accessibility. However, accessibility is not just provided by proximity but by mobility, as long as a minimum level of accessibility is available, it is frequently traded off against other attributes"(Golledge & Stimson, 1997, p. 442). Lifestyle is also an important attractor, it describes the atmosphere or amenity or an area.

3.4.3. The Public Tenant Residential Bundle

Relocating public housing tenants, as movers first and public tenants second, formulate their residential bundles in a similar way to that described above. For all tenures, the search for housing is a "goal-directed activity based on specific aspirations" (Kintrea and Clapham, 1986, p. 1287). Public tenant bundles are generally composed under more constraint than those of the wider population, but public tenants still seek similar outcomes from bundle formation (Wulff and Newton, 1996; Kendig, 1984). Public tenant residential bundles cannot, as Bird (1976) first suggested,

be reliably inferred from the characteristics of the environment and dwellings that they inhabit. This is due to the high level of constraint acting upon public tenants. Public dwellings tend to be allocated, and the tenant household has had much reduced choice of residential characteristics. This section explores those studies that have focussed principally on public housing tenants and the residential elements that they select in relocation, and presents a portrait of public tenant bundle formation that will structure the research in this thesis.

3.4.3.1. Characteristics of the Dwelling

Dwelling characteristics are repeatedly found to be "overwhelmingly important" (Fuller, 1995) bundle components. Among the characteristics of the dwelling, space is a key component. As discussed above, residents of all tenures seek dwellings that adequately meet the space requirements of their households (Clark and Onaka, 1983; Rossi, 1980; Stimson, 1978). This has also been highlighted in studies of public tenant mobility (Kintrea and Clapham, 1983; Bird, 1976; Wulff and Newton, 1996). The discussion of dwelling space for public tenants tends to revolve around the question of what is sufficient space. Bird (1976) found that a house that was too large was a greater source of dissatisfaction than one that was too small. More recently an Australian study (Wulff and Newton, 1996) found that a lack of space was a greater push factor than an excess of space. This disagreement is largely irrelevant to an understanding of tenant bundle formation. The search for adequate space is not questioned by any author, and from the approach based on individual outcomes used in this research, it is up to the tenant to assess how much is adequate to permit their residential satisfaction.

Additional characteristics of the dwelling have been highlighted as important bundle components for public tenants. The physical condition of the dwelling is widely shown to be important to public tenants (Bird, 1976; Kintrea and Clapham, 1986; Fuller, 1995; Wulff and Newton, 1996). Apart from the amenity value and quality of life that it permits, the physical condition of the dwelling is also related to the health of tenants and their households. Public tenants also seek dwellings that are capable of meeting the specific housing needs that they have in relation to their age, illness or disability (Kintrea and Clapham, 1986; Bird, 1976). As an example, Bird notes the preference among tenants for dwelling structures that have fewer stairs or a lift. As discussed in Chapter One, this is a major and increasing requirement of Australian public housing, as the sector's focus evolves towards providing housing for those with increasing and multiple needs.

3.4.3.2. Characteristics of the Residential Environment

Characteristics of the residential environment are important to bundle construction for public tenants, and they are often primary reasons given for requesting transfers between housing stock. Cleaner, quieter, better neighbourhoods are preferred by tenants almost without exception. It is interesting, though not surprising, to note that in the studies which record tenant dissatisfaction with the local environment (Kintrea and Clapham, 1986; Bird, 1976; Lee, 1978), this housing is mainly in large estates of concentrated public housing. Fuller uncovers an interesting finding in relation to this, that the location of the dwelling *per se* is not statistically aligned with satisfaction, more important than location are locational characteristics "such as exposure to noise from roads and proximity to services (particularly shops and public transport)" (1995, p. 177).

Important characteristics of the residential environment also relate to accessibility (Maher, 1994). That is, the accessibility of a dwelling to services and facilities, social contacts, and employment. Because tenant households are more likely to have limited financial resources, proximity is likely to be an important bundle consideration. It has been established that the level of car ownership among public tenants is low (Neldner, 2000), and therefore access to public transport or proximity to local services would be important locational considerations. Useful access to public transport is not straightforward proximity to transport services, because services such as buses and trains travel along set routes, therefore the destination and direction of the services is crucial to their usefulness to tenants.

Centrally important among accessibility desires for public tenants is the location of other family members (Bird, 1976; Lee, 1978; Mason, 1999-2000; SAHT, 1999a). This reflects a similar finding among all movers, though there is a widespread belief that public tenants as a disadvantaged group, at least within Australian society, are especially reliant on these familial contacts. This belief is at the centre of the Australian Government's recent Stronger Families and Communities Strategy (Government of Australia, 1999c). This importance of proximity to familial social contacts does not extend to a strong importance of proximity to friends. In Bird's study, the importance of proximity to family was about eight times more important than proximity to friends in a survey of public tenant reasons for moving.

The access to services and facilities that a location provides has been widely shown to be an important component of tenant residential bundles (Lee, 1978; Fuller, 1995; Kintrea and Clapham, 1986). Lee (1978) found that a central location that was close to shops was important to residents in his survey. It must be noted that the importance of the central location is partly a reflection of the relatively isolated urban fringe location of tenants in the Lee survey, but it nevertheless shows an importance of general access. The importance of access to employment has been discussed above. It is less often sited as a bundle component for public housing tenants because of the demographic fact that tenants are less likely to be participants in the labour force, but importantly for tenants who do participate in the labour force or hope to, it is equally or more important. This is reflected in studies of bundle composition based in societies where the employment participation rate is higher among public tenants; these show access to employment to be selected as an important bundle component by tenants (for example Bird, 1976). The largest monitored public tenant mobility program, the US Department of Housing and Urban Development's Moving to Opportunity, focuses on access to employment as a central pillar. The Moving to Opportunity program has as its central aim the improvement of individual outcomes through the provision of housing that allows opportunities for employment, social interaction, and education.

One further locational bundle consideration is familiarity (Kintrea and Clapham, 1986). Public tenants tend to prefer areas that are familiar. This bundle element is probably closely tied to other locational bundle components, such as the presence of family or work, through the knowledge about an area that they provide.

3.5. Forced Residential Relocation

Moving house is often a particularly stressful life event (Herbert, 1997; Martin, 1999), but relocation is more than moving house. It often involves a substantial change in an individual's living environment - their house, the surrounding area, and their position within it, all change. The impacts of this change are potentially much more substantial where the relocation is forced. There is a large literature on the individual effects of relocation (Downs, 1971; Fuller, 1995; Hartman, 1966; Rohe and Mouw, 1991; Rubenstein, 1988). Relocatees are affected as well as the community left behind. In the case of large-scale relocation associated with urban regeneration projects, the combined effects are significant.

Literature investigating the effects of relocation is diverse, reflecting the very individual nature of these effects and the varying local preconditions As an example, Fuller (1995) examined the effects of relocation on the residential satisfaction of South Australian public housing tenants; Wood *et al.* (1993) investigated of the impact of relocation on children; and Yuchtman-Ta'ar *et al.*, (1979) examined the effects of resettlement of families in Tel Aviv in the early 1970s. Individual tenants present very different relocation problems, and hence each answer is different. Below is a brief summary of the major relocation effect findings from the literature, both positive and negative. Understanding of these potential impacts is essential to proper planning for relocation.

3.5.1. Relocation effects

The negative effects of relocation are well documented, falling into four main categories: loss of accessibility to services and employment, and financial, social, and psychological costs.

Decreased access to services and employment (Downs, 1971; Fried, 1966; The Urban Institute, 1995) are effects of relocation that generally occur when individuals are moved from familiar to unfamiliar, and less central areas. Regeneration programs, a common cause of forced tenant relocation, commonly result in tenants moving from inner city housing estates to housing on less expensive land further from the city, or dispersed throughout the urban area (for example the Moving to Opportunity Program described by Briggs, 1997a). Both of these relocation patterns resulted in tenants, often with limited mobility and high service need, being located away from essential services and employment (U.S. Department of Housing and Urban Development, 1994). Decreased access to employment is a potentially disastrous negative effect. Relocation programs currently underway in the US, such as Gautreaux and Moving to Opportunity concentrate upon employment as a priority outcome. It is important to note here that Briggs (1997) questions the assumption that an individual's proximity to employment is an effective means of improving their access to that employment. He points out that there are other elements to the employment difficulties of those in distressed urban areas such as lack of 'job readiness' and 'discrimination'. A local Australian study of relocation effects (Fuller, 1995) found access to employment was of less importance in the public tenant relocation process because of the very small number of public tenants who actually were employed. This is perhaps a reflection of the strong welfare role of public housing in Australia, where large proportions of these tenants are not in the workforce due to age, sickness, or the need to care for dependent children. This finding is also repeated in Glasgow (Kintrea and Clapham, 1986). Nevertheless, for those in the workforce access to employment is an extremely important requirement of housing. In addition to possible reduced access to employment and services, it is also important to mention that an additional effect of relocation is the likelihood of decreased access to information and knowledge, occurring when a person is sited outside of their familiar surroundings.

Financial costs of relocation have been documented in many studies (for example, Rohe and Mouw, 1991; Sayegh, 1987). They are largely associated with improved housing quality causing increased housing cost. Increased costs are also related to the move itself (for example for removalists or new school uniforms), and establishment in the new location. Public housing tenants, as we have already seen generally have low incomes, meaning that any increase in costs are hard to absorb.

A significant number of relocation effects are social. Relocation can physically break up neighbourhoods, removing individuals from their existing social networks, impacting negatively on those relocated as well as those left behind. Not only are tenants removed from their friendship networks, but they are also removed from all of the built up social capital they have in a community. Familiar people, friends and neighbours often exchange help, be it child minding, transport, or simple greetings. These relationships are important, but are commonly not strong enough to sustain physical distance, and are usually severed with migration out of an area. This is especially the case among the elderly where social networks and relationships are important. This point will be elaborated below. These social effects are important and commonly cited as a significant negative effect of relocation (Fried, 1966; Fuller, 1995; Rohe and Mouw, 1991).

The psychological effects of relocation are much harder to document and potentially affect outcomes the most. Grief (Fried 1966; Kyriakopoulous, 1998) as well as insecurity and stress (Ekström, 1994) are significant outcomes documented in much of the literature. Forced relocation has significant psychological impacts because tenants have reduced control of their living circumstances and location. The level of control individuals perceive is highly important. Many of the related effects, such as sadness, depression, and loss of sense of security (Rohe and Mouw, 1991; Sayegh, 1987), can be directly related back to the level of control tenants have over their housing and location.

Relocation effects on individuals are not all negative, there are some well documented beneficial effects. Most significantly, relocation is an opportunity to improve the housing situation of disadvantaged populations. This has been borne out in many case studies (Fuller, 1995; Rohe and Mouw, 1991; Rubenstein, 1988; Yuchtman-Ta'ar, 1979). It is interesting to note (following Hartman, 1971 and Rubenstein, 1988), however, that a large part of housing improvement is due to the relatively poor quality of the pre-relocation housing, but this is an improvement As discussed above, relocation can positively affect employment nonetheless. opportunity. Not only can tenants be relocated closer to employment but also there is evidence that locating tenants in areas where more of the population is working can increase the likelihood that they too will be employed (U.S. Department of Housing and Urban Development, 1994). The other central positive effect of relocation is an increased level of residential satisfaction (Fuller, 1995). This is not simply the effect of having a better house, but it is the ongoing fulfilment of need and wellbeing gained by the individual from their housing and its surrounding physical and social environment. Increasing residential satisfaction is especially important for public housing tenants as they often experience much lower levels of satisfaction than the population as a whole (Hourihan, 1984; Lu, 1999; Vaarady and Preiser, 1998).

All of these beneficial effects are significant and provide a focus for efforts to improve the relocation process.

3.5.2. Characteristics Can Amplify the Effects of Relocation

Forced relocation has differing effects on individuals. Specific characteristics of individuals or households are known to further influence the effects of relocation, especially:

- Illness and disability (Sayegh, 1987)
- Age (Ekström, 1994; Renck-Jalongo, 1994)
- Ethnicity (Sayegh, 1987)
- Poverty (Fuller, 1995)

These characteristics are common to a large proportion of public housing tenants in Australia. Existing illness and disability make relocation more difficult. There is a greater need for some services, combined with reduced accessibility to them. Likewise, elderly tenants are likely to be more dependent on local networks and less mobile than the population as a whole. As a result the effects of decreased access to services are greater. This decreased accessibility is at a lifecycle stage of greatest service demand. The elderly also suffer the negative effects of fractured social ties most of all, because they have less opportunities and time to build new ties again (Downs, 1971; Fried, 1966; Sayegh, 1987). The immediate neighbourhood is of greater significance to the aged than for other groups. The amplifying effect of age upon relocation is memorably described by Ekström (1994, p. 383). He cites the case of an elderly woman relocated just a few hundred metres away. Though still within the same neighbourhood, she lost contact with her formerly active social network, became increasingly insecure, and died three months later. At the other end of the age spectrum, children are also prone to the effects of relocation, having social networks that are simpler and more likely to be entirely severed with relocation (Renck-Jalongo, 1994). Ethnic groups are particularly prone to the effects of being separated from their social group. Recent migrants especially have been shown in many studies to group together as a coping mechanism, often overriding language difficulties, and providing a familiar environment (Sayegh, 1987). By fracturing networks like this, relocation programs remove an important support mechanism for these groups, intensifying other effects of relocation. Poverty is another important magnifying circumstance for relocation effects. The poor have reduced resources to cope with the other effects of relocation. A demonstration of this is the low rates of car ownership among the poor. With reduced accessibility a clear problem for many relocating tenants, the lack of private transport leaves them reliant on whatever public transport exists. The tenants of The Parks, who have low levels of car ownership (Neldner, 2000), currently have high levels of access to public transport, with a high density of bus routes surrounding them. This density is not even throughout the metropolitan area, and is particularly low in many of the areas with vacant SAHT housing that they are likely to be relocated to.

3.6. Conclusion

This chapter has presented a framework for understanding the residential mobility of public housing tenants. This model portrays residential mobility as a largely rational utility maximisation process, where households attempt, within their own constraints, to attain the best residential bundle they can access. Public housing tenants, as the focus of this study, compose their bundles in a similar way. Their residential movement, as described by established mobility theory. It is secondarily mobility for a group within society with specific characteristics and special needs. The central factor which distinguishes public tenant mobility from that of general residential mobility is the higher level of constraint upon the decision making process, and the higher proportion of forced moves. The residential bundles, which are the collection of residential elements that households seek, are similar across tenure types. They include housing elements, elements of the residential environment, social elements, access to employment and economic opportunities, and access to services and facilities. A review of the literature presents a portrait of residential bundle formation among public housing tenants which shows that public tenants seek dwellings that have adequate space, are in reasonable physical condition, and that meet the basic needs of their age, illness or disability. Public tenants seek residential environments that are clean, quiet and safe, and that provide access to facilities and services, employment, and importantly, to family. Finally, public housing tenants seek residential environments that are familiar or that they have existing knowledge about. Public housing tenants are shown to be a group most at risk from the negative effects of forced relocation, and hence there is an obligation upon governments and housing providers to improve outcomes of the process.