

1 INTRODUCTION

THE MIGRATION PROBLEM IN THE CAPE METROPOLITAN AREA.

Development planning is usually born in a crisis, when economic misfortune and unrest among the poor prompt a city's leaders to promote growth...

(Tomlinson *et al* 1994: 23)

The construction of spatial planning in the Cape Town metropolitan region is extremely advanced, and city planners and implementors have thought deeply about the spatial implications of current delivery and settlement trends. Within South Africa, Cape Town is probably the city structure which has most clearly recognized the importance of spatial planning for development, and has most productively devoted time and resources to working out approaches. The current study should be placed in the context of this urban initiative to take control of spatial development and deliberately bring about the best possible outcome for all the people of the CMA.

At the same time, Cape Town faces considerable challenges which will affect the good or bad outcomes of its urban undertaking. These challenges centre on (1) outside migration and its impact on the local economy, delivery needs and the spatial structure of the city; and (2) internal population movements, especially those associated with the informally housed population and the more settled poor. These trends have potential outcomes which are difficult to predict accurately, and carry the threat of upsetting the delicate planning models which are being introduced. Again, current delivery approaches for housing and infrastructure - which should represent the concretisation of planning approaches - have not always been successful, and housing delivery for the disadvantaged sectors of the CMA population is falling further behind as informal occupation of land and informal housing continue to spread and proliferate (CMC, 1997a). Housing lists are not moving, and land invasions continue to take place. This study tries to address the uncertainty around inside and outside migration in relation to settlement, and to contribute to the refinement of the CMA's spatial planning and implementation initiative.

1.1 Spatial development frame

In producing the Metropolitan Spatial Development Framework in 1996 (CMC, 1997a), the CMA has set out to meet its urban challenges and bring risk factors under control. The city is also working to provide resources on the ground through the Integrated Serviced Land Project (iSLP) which has been put together to forestall the housing needs of the migrant and local-born poor by a comprehensive programme of land release and housing delivery (CMC, 1997). Both of these are essentially spatial development approaches, but there may be some question of a certain amount of daylight between the approaches endorsed in the MSDF and the work being done under iSLP.

Building on spatial development theory, the MSDF emphasizes a compact city model of development. Perhaps the main principle of the compact city is high-density development which will not create an ever-expanding demand for expensive transport infrastructure because the city is allowed to spread outward through low density development which requires high transport investment to move relatively small numbers of people. To control sprawl, the MSDF calls for aggregating denser urban concentrations partly in order to make mass transit systems viable, as a way to move away from far-flung freeway networks which result when private cars are the main transport mode for the city.

However, it is not fully clear how the MSDF planning principles will affect the housing market, or how they will correspond with social concepts of adequate housing held by the different populations which live in the city. That is, it is not certain how well the CMA population will tolerate denser settlement planning, if it is the case that plans for denser settlement can only be brought about through a wide-scale shift to high-rise or at least low-rise housing development for families that are now housing in their own dwellings. Likewise, questions arise over what implications densification in multi-family dwelling units would have for rental against ownership of housing assets, for a population which may see secure individual ownership as a household objective, or in situations where densification and multi-family dwellings may carry an increased risk of social tension, criminal activity, urban decay or outright conflict. Results from the present study document the extent of the rental market for the CMA's main population groups, indicating that while it is substantial it still has considerable room to expand.

1.2 Low income settlement delivery

Although delivery of land and housing for the CMA's disadvantaged groupings was often carried out on a fire-fighting basis under the last government, the iSLP initiative has attempted to anticipate the city's needs and deliver land and

housing from a planning base worked out in response to urban needs. However, the concerns reflected in iSLP in some ways continue the earlier planning approaches to delivery for people of colour. More than the MSDF plans, iSLP delivery may reflect a natural anxiety to keep the lid on the bubbling pot of housing demand for the poor and disadvantaged, in the interests of the city as a whole (CMC, 1997).

Both the MSDF and iSLP are to some extent responses to the preoccupations and anxieties which confront the CMA's urban planners. Although the MSDF mainly addresses urban sprawl as the limit factor for cost-effective development, other concerns also appear in the discussion which have a bearing on migration from inside and outside the city.

Institutional outcomes of physical planning

In addition to the issue of proliferating low-density developments and informal settlement on the outer margins of the city with their unfavourable implications for service costs and transport delivery, concerns for CMA planning may also appear in several areas around urban settlement dynamics. Planned or unplanned settlement processes can be involved in creating social or inter-communal friction, in possible loss of institutional control over settlement in the case of informal areas particularly, and also in crime and violence: the apparent relation between congested physical settlement conditions, higher-density housing delivery and gang control over settled communities on the Cape Flats are a case in point. In this sense, some sections of the MSDF suggest the institutional aspects of settlement and settlement planning as an underlying concern for the CMA's future, particularly in relation to issues of order and disorder.

Spatial outcomes, hollowing out and peripheralization

Concern over the future spatial structure of the city itself seems to surface at several points in the MSDF document, focused perhaps on control of the relationship between the CMA's developed core and its current periphery. As urban development reaches the edge of the Winelands, the CMA's fastest-growing areas appear to be located on this vibrant edge. It is not clear how far the expansion of Helderberg/ Strand and of Tygervalley as new centres of commerce and services represent a threat to the established CBD, which has no land open for expansion on scale and which appears to be a mature centre. At the same time, residential and informal settlement have been expanding to the northeast. Cape Town's identity is bound up with the role of its current CBD as a district of combined financial, commercial, residential, historical and scenic attraction, and its potential as a world city relies heavily on this combination. Rentals, property values and the cost of services moreover are relatively high in relation to costs further from the city core, and the pull for business activity of

moving outward to cheaper and less closely regulated sectors of the CMA is said to be significant. With Johannesburg and Durban already facing an inversion of their urban structure to accommodate the widespread pattern of decaying inner districts and flight of higher-income residents to the periphery, the possibility that the existing CMA may explode into urban fragments and leave behind a burned-out core may represent an additional anxiety for planners: densification and the strict policing of the planned urban edge might alleviate this concern to the extent that they could be sustained. Effects on the tax base and the overall viability of the city would also follow from any such scenario.

1.3 Physical development trends

Cape Town's pattern of development as it unfolded over time has been secured to the harbour on the west by the economic importance of the port area, which gathered around itself layers of economic activity and created the present CBD as an intense concentration of commerce and financial services. Squeezed between the coastal mountain chains, settlement escaped to the east onto the plain and coastal flats behind the mountains. From there it spread further eastward, overtaking on the way the marginal townships to which apartheid city planning had relegated most population of colour. The city's main spines of economic activity lay to the east along Voortrekker Road, and to the south along Old Main Road. The MSDF also defines minor activity spines east-west along Klipfontein and Lansdowne Roads. Between these minor corridors and the main western corridor along Voortrekker Road, a number of residential neighbourhoods were planned in close proximity to industrial parks, expected to provide employment to lower-income white and Coloured residents.

Although Langa has a substantially longer history, the core black townships were developed in the 1960s, on the edge of what was then the city. In terms of apartheid's spatial planning, settlement by people of colour was excluded from the city core, and provided for only where and when necessary, on the outside of the city and on undesirable land. However, population grew rapidly among the disadvantaged communities in spite of official efforts to control entry.

Shanty settlements were present from an early date, originally holding mainly Coloured economic migrants, and triggering white complaints about the possible health hazards of informal settlement (Ellis et al., 1977). On the barren sand flats to the south along the coast, first Coloured and then black township developments were laid out beyond the rim of the city to receive the overflow as the established Cape Town townships filled to bursting point. Langa, Nyanga and Gugulethu traced a route of exclusion to the southeast as the city expanded

and overtook them in turn, ultimately reaching nearly to the coast as Khayelitsha was established in the late 1970s (Eva, 1997; Robertson, 1997). For the Coloured city residents, the central residential areas were succeeded by Manenberg and then by Mitchell's Plain on the sand flats, following the largely unsuccessful Atlantis township located so far to the north as to be outside the reach of Cape Town's commercial and demographic energy.

Informal settlement by black people mushroomed from the 1980s, as black migration began to run up. These settlements concentrated in and around the established black and Coloured township core southwest of the airport, but also on the Cape Flats and in areas delimited for formal township housing. Shack areas developed on relatively low-value unoccupied land usually owned by the municipality, but also appeared on the outside of the city to the north in the Milnerton area, to the northeast around Kraaifontein/ Brackenfell, at points in and near the southern activity spine, and scattered in the peninsula region. More recently informal areas have been appearing and consolidating in the Philippi area, and to the east around Blue Downs, at the extreme planned edge of the city. The centre-periphery dynamics of informal settlement partly mirror those of the formal city but do not have entirely the same determinants, and may be of concern for city planning and for the framers of the MSDF.

While formal and informal areas for Coloured and black occupation were being established, the core areas for economic activity were also shifting east. In the last ten years, the Helderberg node has emerged as a key centre of up-market economic activity, pulling commerce and finance inland from the coast and harbour (DBSA 1998b), and drawing from a somewhat different market share from that supporting the longer-established Bellville node. To some extent, the economic dynamism of these peripheral centres could be seen as a threat to the spatial and economic position of the port and CBD, and maintaining these outer nodes in a viable hierarchical relation with the CBD may present a planning challenge. This study of migration trends in the CMA can be seen to some extent in the context of planning for a city in which future location trends for the commercial, financial and industrial core areas are not fully clear.

Cape Town's new municipalities have been established against this background. In order to create viable new city departments with a range of incomes and economic strata which will allow internal cross-subsidisation, the municipalities have been laid out largely from north to south, rather than as city growth has moved, from west to east. The range of settlement types and economic levels found within the current municipal structures make interpretation of migration flows between the municipalities problematic, and it may be preferable to consider migration between smaller urban zones in order to see how flows relate to the structure of the CMA. Finally, it is worth noting that these municipal

structures will in all probability be restructured once again, when new national legislation on local government is implemented in 2001.

1.4 Theorizing migration

In the international literature, the broad context for large-scale migration is growth in the urban sector combined with stagnation or decline in the rural sector. However, as Frew (1997) comments, the processes involved are complicated and opaque, and display wide international, national, regional and local variation. He notes it is difficult to generalise about how migration systems necessarily work in the given case, and there is a need to see the determinants clearly before laying down policy.

What has been described as urbanization in South Africa has often involved a continuing system of circulatory migration, rather than a one-way gravity flow which transfers rural-born people permanently to the city. Circulation as a household support strategy has been the basic model for labour migrancy while it has operated in Southern Africa. However, it has been widely assumed that circulatory migration systems would eventually fall apart, dissolving into one-way gravity flow (cf Todaro 1976, Harris and Todaro 1970).

Mabin (1989, 1990) has made the argument that circulatory migration systems are not necessarily ephemeral: moving back and forth between a rural home base and the city has intrinsic value in a number of spheres, including household support options. In this light it will not necessarily follow that circulatory migration will disappear in any given case. Instead, it will persist as long as it has usefulness for the migrants involved. His interpretation sheds light on the policy problem of whether the Cape migration system, involving rural Western Cape as well as Eastern Cape migrants travelling to Cape Town to spend the main part of their working lives and then returning to their home communities at retirement, is stable. Or, alternatively, even whether it is still circulatory and likely to remain that way. The growing rural crisis in the Eastern Cape -- rising unemployment and a collapsing land economy for the poor -- points to the probable continuation of migration to Cape Town and to an institutional weakening of circulatory migration systems from this sending area. The economic future of agriculture in different regions of the Western Cape province, similarly, points to related migration streams of impoverished rural Coloured households to Cape Town.

Looking at the question from the other side, if it is assumed that circulatory migration systems are not necessarily stable and may change at any time, one of the main issues involved in considering migration will be the provision of infrastructure. Though the search for employment may remain the main engine

of migration at a general level, public infrastructural provision comes a close second. This category includes both housing delivery and delivery of services. Tiebout (1956) and his followers have developed the argument that movement of households within the urban context responds mainly to the delivery of public goods. In this light, urban residents use intra-urban migration to sort themselves spatially, by moving to the area with the highest standard of public delivery they can afford. Such intra-urban migratory streams interact with, and influence, city planning initiatives aimed at compaction and at stable centre-periphery spatial arrangements.

1.5 Conceptualizing the study

Looked at in the shifting light of planning concerns, the objectives for the present study centre on clarifying migration from several viewpoints.

The key questions are

What is the nature of intra-CMA migration taking place

- between settlement categories?
- between spatially defined zones?

What is the nature of migration into and out of the CMA?

Settlement categories are identified by way of two criteria - informal and formal settlements, and former racially defined residential (group) areas. Zones are shown on Map 2.

Some of the secondary questions which flow from the key questions are

- which groups are moving most rapidly into the city and what are their needs and potential contributions likely to be?
- what is the demographic potential for increases in the different population fractions now in the CMA?
- what are the interests, perceptions and priorities of different migrating groupings in the CMA?
- what is the relationship between movement within the city and the housing market?
- what is the nature of trends for informal settlement particularly.

Underlying all of these is the issue of centre-periphery relations in the light of internal and external migration, and their possible implications for the future of Cape Town as a world city.

Accordingly, these questions are addressed in relation to the concerns for planning of the city's future which can be seen in the MSDF and in the iSLP, as well as those implicit in the changes in the city's structure and composition which are taking place now. The study takes in all the major population groups

which now live in the CMA, and the different income levels which are found in the city population. Research methodology is reviewed in detail in Appendix 1.

2 Demography: population profiles of the CMA survey sample.

The CMA is a demographic composite, with the different race and income groups that inhabit different districts in the city comprising the building blocks of the CMA's population makeup. These groupings have different needs, and relate differently to population instability and to its policy consequences. The basic characteristics of the sub-samples in the migration study for age, gender, education and employment status help determine how race, income and type of settlement define on-migration for the metropolitan population. The short profile below of the 991 cases in the CMA migration sample shows how they roughly mirror the parent CMA population, and points to how and why households from different groupings are involved in on-migration.

Results given here suggest that age factors have a profound effect on migration, while gender appears to be much less significant. Education levels did not closely predict either employment levels or income, suggesting that information processes around migration may account for much of the reported income differential between the black and Coloured areas as disadvantaged settlements with similar education levels.

2.1 Age

Of the three major race groups in the sample, the black population is youngest by a wide margin. Table 2.1 (Appendix 2) gives the ages of household heads by race, and shows that nearly two thirds of the black household heads were 45 years of age or less. Their comparative youth is related to the strong migration stream into the CMA from Eastern Cape, which brings in younger households that are relatively poor but also relatively ambitious and employable, and are in a position to build up new lives at a distance from their communities of origin. In contrast, the Coloured sample population was significantly older, with only about 43 percent of household heads in the age bracket 45 and under. However, the oldest grouping was the white sample, which contains a high proportion of retirees moving into the CMA to enjoy the high-quality lifestyle available to higher-income households. Only 29 percent of white sample households had heads under 46 years of age, and 31 percent were older than 65. The high mobility of the white households is therefore partly accounted for by their longer careers compared to the much younger black families. As black families get older, their intra-urban migration tracks are likely to lengthen. However, the low

mobility of the Coloured households in relation to black households is unlikely to be a factor of relative age.

Within the black population, the youngest households are found in the informal areas and in the hostels, at 68 and 67 percent of heads under age 46 respectively (Table 2.2). The township population is significantly older, with only 57 percent of heads under age 46. The on-migration potential of black households in the CMA therefore concentrates in the poorest areas, which receive most of the arriving migrant families and also offer the least amenities in housing and infrastructure.

2.2 Gender

A countervailing factor in relation to migration is likely to be gender of head, in relation to the high representation of women-headed households in the CMA migration samples. Women heads in the CMA black population find themselves in charge of households either through inheriting the headship as widows, by splitting up with husbands or partners or by deliberately choosing to go out on their own together with their children: many now seem to make the journey from Eastern Cape alone. Coloured women heads appear in qualitative results as less likely to deliberately choose the single option than black women, for whom it is a culturally defined alternative, and Coloured women tend to become heads of household as widows or as abandoned women.

Table 2.3 shows an average of 44 percent women heads in the black population sample, and 38 percent for the Coloured sample: by contrast, white households were by far the most likely of the main samples to be male headed. Table 2.4 shows no difference in the share of women heads between formal black townships and informal areas, though the hostels were dominated by families run by men and by single men.

Women headed families often tend to have greater difficulties than male headed families in navigating the social entry system, even in urban areas; and therefore may tend to be more stable once settled than men's families. However, women heads also placed very high priority on quality of housing and infrastructure, and the large share of women heads may partly explain the very high reported willingness in the black informal population to move in order to improve access to housing and services (see section 5 below). Women who may have made the journey into CMA from another province may also be equal to the institutional challenge of moving to get what they have identified as life goals: there was no great difference between the number of moves reported by men heads and by women heads, though women heads tended to be older, and therefore made fewer moves in relative terms (Table 2.5). If intra-urban migration is largely

driven by differential access to housing and infrastructure, a possible increase in the already high proportion of women household heads may not act to reduce population instability as much as might be expected.

2.3 Education

For the Coloured and black sample populations, education levels of household heads were roughly parallel. Coloured heads had a slight edge at higher levels, although black heads were younger and therefore might be expected to reflect higher education levels other things being equal (Table 2.6). For both groups, about 7 percent had no education. About 38 percent of the Coloured sample had not reached functional literacy with a Standard 6, against 41 percent of the black heads of household. As Dewar, Watson & Rosmarin (1991) have noted, this sector of the population of colour is not well equipped to be competitive in the labour market, and is likely to be confined to unskilled work in a very competitive environment with a high risk of unemployment.

At the higher end of the labour market, about 17 percent of the Coloured heads had reached matric or had a higher qualification, compared to 13 percent of black household heads. For the white population, 63 percent of heads had reached matric or gone further, and three percent, mostly older people, had not reached a level indicating functional literacy.

Table 2.7 breaks down education level of head by type of settlement, for a smaller total sample base. The black formal townships of Langa, Gugulethu and Nyanga accommodate people born in the CMA, or longer resident in the CMA than the inhabitants of the informal areas. The black townships showed a wider spread of education levels than the informal settlements, but also developed a significant educational advantage at the top levels. A quarter of the black township residents had obtained their matric or gone farther, against five percent in the informal settlements. Results for the black townships were similar to results for the Coloured townships, though the Coloured areas had fewer matric or high-level qualifications and more heads in the Standard 6-9 bracket.

Against expectations, the hostel population displayed consistently higher education levels than the informal settlements, with 75 percent of heads reaching functional literacy, against 54 percent in the informal areas and 64 percent in the black townships. About 18 percent of hostel residents qualifying as heads of household reported they had obtained matric or better. If these figures can be taken at face value, they help to explain the good employment levels for hostel residents noted below, and may be attributable to a high proportion of younger men in the hostels.

2.4 Employment

Unemployment in the CMA migration samples was unexpectedly low in most categories. Table 2.8 gives the distribution of employment and unemployment for the CMA race group samples. Overall, just under half the Coloured or Indian heads of household were formally employed, against 60 percent of the black household heads and 37 percent of the whites. Though unemployment and self-employment were also important, the main demographic factor in the differences here was what share of household heads were retired, against the total who were in the labour force. In the relatively old white population, more households heads reported themselves retired than as participating in the work force. For the younger Coloured / Indian and black populations, the opposite held true.

A more detailed breakdown of the different types of settlement helps to disaggregate employment status in the black communities (Table 2.9). The share of retired heads ranged down from nearly half in the former white areas to under a third in the Coloured townships, less than a fifth in the black townships, one in 20 in the informal settlements, and none in the small hostels sample. Unemployment levels were reported at three percent for white areas, 7 percent for the Coloured townships, 10 percent in the black townships, and 22 percent in the informal areas. However, the hostels recorded only 8 percent unemployment.

While education differentials appear to play a role in doubling the unemployment level for the informal areas over that found in the black formal townships, the differentials recorded seem too small to account for the divide. In addition, more effective information processes and networks among the better established and better connected township populations appear to have a significant effect. The same holds true to a greater extent for the Coloured townships, where unemployment is lower than it is in the black townships.

Overall, and relative to recently reported unemployment rates for the Cape Town Metro as a whole at 21 percent (Bekker & van Zyl 1997, DBSA 1998), these levels appear relatively moderate. They are particularly favourable in relation to the sending areas in the Eastern Cape, where rates of more than 40 percent have been regularly recorded (DBSA 1996).

The push toward economic activity among heads of household in the CMA appears to be very strong. Nearly all unemployed heads of household who had been in the labour force were reported to be looking actively for work, or otherwise self-employed. That is, though some may have returned to home communities, there were nearly no discouraged and demotivated workseekers recorded in the CMA sample. Although just under a third of Coloured female

heads were women who only did housework, for all other groups the rate of economically inactive women heads ranged downward from half that level. Self-employment rates were highest in the black and white communities, and informal business activity appeared to soak up nearly all the non-workseeking, structural unemployment for the sample as a whole. Although serious unemployment is concentrated in the black informal settlements, the employment status of most population sectors seemed to be significantly better than the national average, and much better than the sending areas in the Eastern Cape.

2.5 Income

Relative wealth and poverty for race and settlement are central to understanding how on-migration creates unstable urban populations. Per capita income levels recorded for the race groups diverged much more than either education or employment levels (Table 2.10). Divergence would have been greater yet if many higher-income households had not been unwilling to divulge their total incomes on a survey¹.

A third of the black households recorded per capita income from all reported sources of less than R 200 per month, indicating relative poverty despite comparable education levels to the Coloured/ Indian sample, and relatively higher overall employment among heads of household. Seventy percent of the black households had per capita income below R 500 per month, a relatively poor level for an urban area. By comparison, the Coloured and Indian households recorded only ten percent with less than R 200 per month, and much less than half with per capita incomes of R 500 or less. For whites, two percent recorded less than R 200 per person, and 12 percent less than R 500. True values for whites would be higher given a full record for upper income families.

To some extent, the low income levels in the black groupings were accounted for by relative youth: the higher-earning Coloured/Indian category was older, and therefore included more people at a higher earning point in their work careers. However, the differential in age did not appear large enough to resolve the earning differential. Results quoted below (section 5) also suggest that job search becomes a less important motivation among black households once employment is initially obtained, so that later increases in income are likely to be relatively gradual.

¹ For a more broadly inclusive income measure, a household income categorization into high, medium and low has been interpolated using related indicators to fill in where actual household income was not supplied. This measure applies to the entire working sample of 986 cases, and appears in Tables 2.11 and 2.13.

Results here confirm that although employment levels were higher in the black communities, job quality for black household heads was significantly lower than for the Coloured/ Indian grouping, and very far below that in the white grouping. The combination of poor job quality with relatively high employment appears to relate to the continuing inflow of new workseekers from outside the CMA, who find work but do not command the higher quality jobs available to established residents through urban experience, information and connections.

If per capita income is disaggregated by type of settlement (Table 2.11), the income distribution for the black formal townships broadly resembles that for the Coloured townships, but concentrated many more cases in the lowest R 0-200 category at 27 percent than the Coloured grouping at 9 percent. Likewise, the top end of the distribution placed 12 percent in the Coloured townships in the R 2000+ bracket, against 5 percent for the black townships.

For the informal settlements, the picture was worse. Nearly 40 percent of the informal areas population recorded per capita income of R 200 per month or less, and just on 80 percent came in at less than R 500 per month per person. Five percent of the informal residents reported more than R 1000 per person per month, and one percent reached the R 2000+ level. There appears to be a significant poverty sector in the black townships, but in the informal areas this group dominates the population.

For the hostels, with relatively small family units and many employed single men, per capita income came out slightly more favorable than in the townships, and on paper the hostels were well off relative to the informal areas. Only 20 percent of hostel residents recorded monthly per person incomes of R 200 or less, and 8 percent reached the R 2000+ bracket. However, men in the hostels often appeared to send home more of their income as remittances than the family units in the informal areas, so that nominal incomes were not necessarily fully indicative of economic viability.

A quick overview of income levels in relation to settlement type is provided in Table 2.12. Just on 40 percent of the black township population fell into the low income category, along with 54 percent in the informal areas and 48 percent in the hostels. Eighteen percent of Coloured households and five percent of whites were estimated to be in the same bracket. The middle income category was largest for the Coloured townships at 56 percent, followed by the black townships and informal areas and then by the hostels, with the white areas trailing at 25 percent. For the upper income grouping, white areas were far in the lead at 71 percent, with all other communities at a quarter or less. The informal areas were far behind all other settlements for high income households at six percent.

Lastly, the relation of residential instability to household income is summarised in Table 2.13. Results confirm that the most mobile households have been the wealthiest, who were also the oldest, and the most likely to have completed their migration paths. This category was overwhelmingly white. A little over a quarter of this grouping had not moved in their lifetimes, but these high-income households dominated the category which reported five or more moves. In contrast, over half the middle income households said they had never moved, and this category became progressively more unlikely to move on after each stop. This income category was predominantly Coloured, but contained nearly as many black township households as well as others.

The low income category was predominantly black, with about a quarter Coloured or Indian representation. About one household in five reported that it had never moved at all. For those who had moved, the distribution of mobility for the poor was bimodal, with most households having made either one or two moves in relation to the CMA, with perhaps others, less well reported, before arriving. A much smaller mode occurs at four moves.

The low income category was therefore unexpectedly stable in relation to CMA intra-urban migration. At the same time it is also relatively young and ambitious to improve living standards in relation to housing and infrastructure, and very willing to move on in order to improve chances for any of a number of lifestyle goals.

This impoverished young population is only partway through its migration trajectory, and contains a large number of possible moves in potential. How many are actually made - and the resulting level of population instability - is likely to depend to a large extent on how CMA decision makers approach policy for the poor at the intersection of housing, infrastructure and urban on-migration.

3 Movement into the CMA

3.1 Date of arrival

Roughly 55 percent of the population reflected in the CMA survey sample came from outside the Cape Town metro area during the lifetime of the household head. Table 3.1 summarises how the local-born and migrant population show up against the time frame of the last thirty years.

For the Coloured population, migration has been much less of a factor in influencing settlement than it has for the black and white groupings. More than 80 percent of the Coloured population of the CMA sample is reported to be born in the city or to have lived in Cape Town before 1970, and for the small Indian or Malay population the figure is over 90 percent. Migration since has been steady and relatively moderate. Coloured migration peaked at 6 percent in the 1980-84 period prior to the abolition of influx control, and migration in the 90s appears to have been slower if anything than migration in the preceding years. The Coloured population is therefore the CMA's demographic anchor, but its position has changed in relation to migration of the other race groups.

With Cape Town's reputation as a very attractive place for better-off families to work or retire, the white population has seen much more migration activity originating from outside the city. Less than half the white residents reported being local-born or in the CMA before 1970. Migration by whites as reflected in the sample has always been faster than that of Coloured respondents, and rose sharply after 1984 to ten percent or more over each 5-year bracket. After 1995, white migration represents 13 percent of the total white sample, and may still be rising. However, the demographic results are diluted by the older age of the white sample and its low reproductive potential. The low percentage of children in migrant white families as compared to other population groups reflects in smaller household sizes. (Mean household sizes are displayed in Tables 3.1a and 3.1b)

For the black population, recent migration has exploded since the end of Coloured labour preference restrictions and the threat of clearances, and has been driven by worsening economic conditions in the main Eastern Cape source areas. This population grouping is also relatively young, and carries with it most of its human potential for demographic increase as well as its workforce potential.

Less than a quarter of the adult black CMA population was born in the CMA or already living in the city by 1970. Black migration slightly lagged white migration through the 1970s, but had already leapt ahead in the early 80s. The

period 1985-1994 saw half the present black CMA population entering the city. Since 1995 the reported rate of black migration has slid below that of whites, but several commentators see this trend as temporary and expect a rising or high and steady rate into the foreseeable future (cf Abbott & Douglas 1998, also Cross, Bekker, Mlambo, Kleinbooi, Saayman, Mngadi, Mbhele & Pretorius 1998).

If rates are annualized, about 0.4 percent per year of the present Coloured population arrived during the early 1990s and 0.7 percent in the later 90s. This relatively low rate can be compared to 2 percent of whites yearly in the early 90s and 4.3 percent yearly in the later 90s. For the black grouping, reported annual rates entry would average out to a peak of 6.4 percent in the early 90s, against about 3.3 percent in the later 90s. These rates respond partly to opportunities in the destination areas, partly to conditions in the sending areas, and partly to legal and institutional conditions governing population movement. There does not appear to be a linear trend.

These migration streams are drawn from several kinds of source area. The origins of the migrant streams can be looked at in two ways, in relation to whether the source area is rural or urban (Tables 3.2, 3.5, 3.6), and in relation to the specific geographic regions from which migrants are coming (Tables 3.2a, 3.7 - 3.11). Differences in where migrants are coming from relate both to when migration streams are arriving, and to what their relative capacities are to find employment and contribute to the economic and cultural life of the CMA. The section following first considers the timing of arrival in the CMA in greater depth. It then explores both the rural-urban and regional origin dimensions of the CMA's main migration streams, in relation to the endowments and capacities of advantaged and disadvantaged migrants.

3.2 Rural, urban and local-born CMA residents

The distribution of sample households by urban and rural origin is presented by race group in Table 3.2, and for regional origins in terms of settlement type in Table 3.2a. Results confirm that the Coloured grouping is by far the largest born in the CMA itself, but also show that most Coloured respondents from outside the CMA are rural-born, with relatively few urban cases appearing. For the white category the single largest group is locally born at 45 percent, but a second very large sector is represented by rural-born respondents at 37 percent. Urban-born whites from outside the CMA were the largest urban-born grouping, but they made up only 17 percent of the total for the race group.

For the black respondents, three quarters reported they were rural born, but the urban-born grouping from outside CMA was relatively larger at ten percent than for the Coloured group at six percent. Proportionately, nearly as many urban-

born black respondents were from outside the CMA as were from inside the metro. This grouping may be growing.

At 450, the total number of rural-born respondents from outside CMA outnumbered the urban-born CMA grouping at 410, but the margin was not large. As the urban centre of a farming hinterland the CMA still seems to contain a very large number of people from rural areas of all races. About twice as many of the rural-born grouping were black as white, but the white contingent from rural areas was unexpectedly large. The Coloured rural-origin category was the smallest, but was not insignificant at 20 percent of Coloured respondents.

3.3 Spatial region of origin

The regions from which CMA households are coming can be seen in Table 3.2a at a finer-grained level of discrimination. Figures confirm that most of the migrant Coloured population is coming from the Western Cape itself, at 16 percent of the total. Smaller shares came from the Eastern Cape at 3 percent and from the Northern Cape and further afield at 5 percent. Two percent were from Namibia and other source areas outside South Africa.

The white category also reflected the Western Cape as the main source area for migration at 20 percent of the total, with a slightly smaller share coming from the interior and particularly Gauteng at 18 percent overall. The Eastern Cape was a less significant source area at five percent, but foreign areas migration represented 15 percent of the total white sample population. This relatively high figure illustrates the Cape Town area's overseas linkages and potential for tourism investment, but also draws attention to the need to protect these migration flows by ensuring good public order and just public provision.

Origins of the black CMA population were divided depending on the share of each category born in the CMA itself. Nearly a third of the black formal townships samples were local-born, against six percent for the informal areas and eight percent for the hostels. These latter two groupings represent for the most part children of township residents unable to find housing in their communities of origin, so that they flow into the informal areas and hostels as a temporary or default option. This movement represents loss of housing quality and quality of life for the black population, and illustrates shortfalls in CMA public provision for the disadvantaged.

Against these internal flows, the large population stream from the Eastern Cape provides most of the CMA black sample population as migration. For the township samples it represents 63 percent in total, and for the informal areas and

the hostels 85 percent in each case. Within this stream variations by destination area are small, but may turn out to have significance.

The share of the Eastern Cape stream accounted for by urban - non-homelands - source areas is lowest in the established townships at 16 percent, rises to 20 percent for the informal areas, and comes to 29 percent in the hostels. This gradient seems to reflect the relative youth of the population arriving at these destinations, with the hostels population youngest. If so, this urban black Eastern Cape stream may be increasing its share of total migration.

Over time, former Transkei is the dominant source area for the CMA migration stream, accounting for about three quarters of the townships and informal areas sample migration, and for nearly two-thirds in the hostels. Transkeian migration has been powered by lack of economic opportunities in the impoverished former homeland, more serious in the barren former Transkei than in the smaller Ciskei homeland with its relative advantage of proximity to job opportunities in the Border and East London regions (Dewar, Watson & Rosmarin 1991). Ciskeian presence was marginally higher in the townships than in the hostels and informal areas.

Other sources of migration for the black sample population were relatively insignificant. The random sample turned up only one percent foreign migration in the informal areas, and less than half a percent in the townships. However, reluctance of migrants from other countries to be interviewed as non-South Africans in an environment of tension and illegality may contribute to the low representation of migrants from other countries in the sample. The few migrants from other African countries included Sudanese, and were found in the inner CBD samples that were ethnically mixed rather than in the mainly black informal areas. Qualitative results suggests that this migrant grouping from Africa to the north is highly visible in the CBD but in residential terms is narrowly concentrated in the Woodstock and Salt River communities with some presence at Hout Bay and Muizenberg, and has not yet penetrated the black areas of greater Cape Town area to any significant extent.

Migrants from India and other countries were found a little more widely in the Coloured areas. Eight percent of households identified as culturally or ethnically Indian have entered the CMA since 1990, with some coming from overseas. Using social networks, some appear better integrated than African economic migrants arriving with few if any connections to the Cape Town population.

3.4 Periodizing settlement: rural, urban and local-born

In terms of when the respondent household arrived in its present house, Tables 3.4-3.6 show how urban and rural-origin families have been settling in the CMA in relation to those born in the CMA itself. Table 3.4 for the CMA-born category shows settling in for most of the Coloured sample, but for fewer blacks and whites.

Families born inside the CMA seem to have moved relatively often within the metro boundaries, and not many have been settled since 1970 (Table 3.4). The Coloured households reported the least movement, but only 38 percent were in their present houses by that date. Twenty-one percent settled in the 1970s, followed by a drop in urban movement. In the 90s about 24 percent took up their present housing, with fewer moving in after 1995 than before it.

For the more mobile CMA-born whites only 13 percent settled prior to 1970, and rates of take-up for current housing peaked in the early 90s at 27 percent. Nearly 20 percent of the local-born whites have settled since 1996, so that nearly half the local-born white population has moved since 1991, as against less than a quarter of the Coloured grouping. The white grouping has more financial and information resources than the Coloured grouping, and has more scope to use the housing market to achieve their lifestyle ambitions.

For the locally-born CMA-origin black sample, the time line for arriving in the current house closely resembles that for the whites, though housing conditions were very different. That is, the distribution of CMA-born black households taking up their current housing since 1970 looks much like that of the white grouping in terms of when families settled in.

The arrival sequence of the rural-born migrant population is given in Table 3.5: this group accounts for most of the black sample population but for fewer Coloured and white families. Coloured families coming in from rural areas have settled in their present housing more recently on average than the locally-born section, with 29 percent settling in the 1970s and 25 percent in the late 80s. During the 90s, recorded settling of rural-born Coloured families has been declining, to 11 percent in the period since 1995.

For whites, settling into housing by rural-borns was strong in the 1970s at 20 percent of the total, but peaked in the early 90s at 29 percent. Since 1995 only 13 percent have settled, reflecting a trough in on-migration by rural-born whites in the CMA similar to that of the rural-born Coloured families.

This pattern is mirrored in the large rural-born black population, where the most recent peak in migration also occurred in the early 90s, in a period when controls over black urban movement had relaxed. After a run-up in the late 80s to 30 percent, the 1991-95 period saw 38 percent of black rural-born families settling into their present housing. The late 90s rate has dropped to 14 percent of the total for black rural-born families, still higher than that for white and Coloured households.

However, the 1995-98 period represents an incomplete time period, including only three years instead of five. If reported rates of settlement are equalized pro rata, settling rates for black households would be about a third lower in the late 90s than in the early 90s, reflecting continuing on-migration. For Coloured families the rate would have risen by over a third, and for whites it would have fallen between a quarter and a third.

The urban-born population arriving and settling from outside is presented in Table 3.6. This fraction of the CMA population represents only about ten percent of the total sample, with nearly two black respondents for every Coloured or white.

For the Coloured sample population, the peak for urban-origin migration was before 1970, though rates have been rising in the 90s to account for 41 percent of urban-origin migration in total. That is, urban-origin migration makes up an increasing share of total Coloured settlement in the CMA. White urban-origin settlement is clearly rising, with 27 percent of white urban-origin families settling in during the late 90s, compared to 13 percent of white rural-origin migrants. The trend line suggests a possible permanent shift toward the urban pole for both Coloured and white migration into the CMA, though the total urban-origin sample for whites was less than half the size of the rural-origin sample, and urban-origin migrant Coloured respondents came to less than a tenth as many as the CMA-born Coloured sample.

The black urban-origin stream represented only one person for every eight migrants in the sample who came from rural areas, but the volume of urban-origin black households settling in at their peak in the early 90s accounted for 62 percent of the total, a very rapid increase where there had been relatively few urban-origin black people arriving in the CMA before 1985. Since 1995 the rate has fallen back to 12 percent, close to but below the 14 percent rate for rural migration. Whether a permanent trend is developing is not clear.

3.6 Periodizing settlement: origin by region

A closer look is possible through Tables 3.7-3.11, which give a periodized view of migration in relation to regions of origin. Table 3.8 shows migration for the Coloured sample, indicating that a number of the respondents in this grouping arrived in the CMA as children with their parents. It also indicates that nearly 20 percent of the relatively rooted CMA Coloured population report they have never moved from the houses they were born in. In this light the Coloured migration stream is small and difficult to pin down analytically.

The greater part of the Western Cape Coloured migration to the CMA seems to have entered during the 1960s and 70s, when most of the CMA's informal areas were predominantly Coloured. At six cases out of a total of 56 migrating families in all, relatively little Coloured migration from outside is reported in the townships since 1990, and only eight Coloured respondents in total turned up in the random sample for informal areas. This relatively small migration stream may now be going into informal areas such as Chris Nissan Park as well as into smaller new settlements and Coloured sections of predominantly black informal areas, but it currently seems to be on too small a scale to show up clearly in the random sample for the CMA as a whole.

The Coloured stream into the townships from the Eastern Cape is relatively a little more recent than the flow from Western Cape, but very small by comparison. The only expanding sector of Coloured migration which seems to be appearing in the townships is from other parts of South Africa, particularly the Northern Cape. This stream is also extremely small, but shows a quarter of its recorded cases arriving in the CMA since 1991.

Since qualitative material suggests that fairly significant Coloured migration is still arriving in the CMA and is going into informal areas for the most part, quantitative analysis of Coloured migration involving informal areas may require separate study. Such an inquiry would need to target specific settlements where these families are appearing. Like the migration stream from Africa to the north, current Coloured migration appears fairly concentrated in specific areas rather than widely dispersed.

The comparable situation for whites is given in Table 3.9, which appears to show a fairly steady flow of white migrants into the CMA from the main source areas. Again the largest number of households of Western Cape origin entered the CMA relatively early, with another small peak in 1981-85. On an annualized basis this stream would be trending up marginally in the late 90s, to about 3 percent per year from about 2 percent. In contrast, the Eastern Cape white stream has been relatively low and steady at an annualized two percent or more

of its total, but numbers are too small for any accurate estimate. The stream from other parts of South Africa and the outside world has risen significantly since 1995, to 5.0 percent per year on an annualized basis.

For the black township households, relatively small numbers of respondents report having come to the CMA from the Western Cape (Table 3.7). Instead, the Transkei former homelands stream was at its apparent height in the 60s and 70s, accounting for 45 percent of its cases during these years. A second peak occurred between 1986-1995, with 39 percent of Transkei migrants entering CMA. The Ciskei stream was also strong in the early years, but reached its recent peak slightly later than the Transkei area, at 25 percent of cases in the early 90s. Though numbers are too small to show a clear result, the urban-origin stream from Eastern Cape also peaked in 1986-90 at 23 percent, but has continued into the late 90s at a slightly higher apparent annualized rate of 2.7 percent than that reported for the former homeland area at 1.0 percent.

The informal areas report a much more recent migration stream overall (Table 3.10). All spatially defined migration streams except those for the Eastern Cape urban areas and for South Africa beyond the Cape run up in the late 80s, and peak between 1991 and 1995. This time slice accounts for 36 percent of the former Transkei flow reported, 67 percent of the Ciskei stream, and 43 percent of the very small Western Cape migration stream. In the three years 1996-98 all these flows drop substantially, to 2.3 percent for Transkei and 3.3 percent for the urban Eastern Cape, while the Western Cape and Ciskei recorded flows are too small overall to return results. During the 80s and 90s, migration from other parts of South Africa outside the Cape remains constant at 17 percent. However, at only six respondents in the sample this stream is insignificant relative to flows from the Eastern Cape.

Hostels results are given in Table 3.11, but deal with a sample too small to be subdivided analytically. However, the major streams are from former Transkei and from the urban Eastern Cape, with peaks in the early 80s and early 90s. Other streams are not significant, and all reported flows drop after 1995.

Overall, migration from former Transkei accounts for more of the black formal townships stream at 77 percent than it does in the informal areas at 68 percent or in the hostels at 59 percent. Since the townships, informal areas and hostels have drawn the main part of their populations from the total migration stream at different times and from different age cohorts, this finding seems consistent with a possible proportional drop in the dominant position of the Transkei source area in relation to Eastern Cape migration to the CMA. However, results are not conclusive.

3.7 Employment and integration capacity for CMA migrant streams

Differences between source areas and between urban and rural streams are perhaps most significant in relation to the capacity and training of migrants as it affects their chances of integrating successfully into the CMA, and contributing to the economy and civil society of their chosen destination. In particular, the levels of capacity found with migrant households relate to their chances of finding good quality jobs and being able to use the housing market, while avoiding poverty and advancing their standing. In this sense, defining the characteristics of the migration stream is central to foreseeing and planning for the effects of migration on the host city.

The conventional wisdom is that migrating rural-origin households in any country tend to be socially more conservative and more cohesive so that they carry with them less social dislocation, but also tend to be less educated, less employable and less able to make use of urban opportunities. Results suggest this is not necessarily the case in the CMA. The series of tables 3.12-3.24 break down the profile of migrant households for gender of head, age, marital status, and education, before providing a glimpse of outcomes in relation to employment and household income.

3.7.1 *Household cohesion and social dislocation: Gender and marital status of head*

Tables 3.12 through 3.15 give gender of head for migrant households in relation to urban/rural origins and to the region from which the household comes. For the households originating inside the CMA, percentages of women heads were recorded as high for Coloured and particularly for black households (Table 3.12), but were relatively lower for whites. However, women heads were still more common among the Coloured households entering from outside, with 41 percent for those who were rural-born and 46 percent for the urban-born category. It appears that in spite of the strong family ties characteristic of the Coloured community, a very large share of households are in the socially and economically weak position of being female-headed, with all the disabilities and poverty risk this implies (May, Posel & Carter 1996). In addition, migration from areas which might be thought more conservative is weakening rather than strengthening this position in the host population.

For the white households, women heads were likewise more common for migrating households than for those from the CMA, but total numbers of women heads were relatively smaller. The white households' tendency for women heads is also related to the older demographic status of white migrants, which

carries a greater percentage of widows as opposed to single women and divorced or abandoned wives. However, migration again appears as weakening rather than improving family coherence for this race grouping.

The black households recorded the highest percentage of women-headed households, but in this relatively young population single mothers and broken relationships as well as delayed marriage and process marriage appeared proportionately more often. Migration is positive insofar as it brings in mainly rural families with fewer women heads, at 42 percent against the CMA average of 46 percent. At the same time, the urban-born black migration stream may be expanding, and carries women heads for as many as half its households.

Tables 3.13-15 give gender of head by regional origin for Coloured, white and black households. Female headed households appear as more commonly found in all the migration streams than in the CMA local-born Coloured population, but reached the 50 percent mark in the migration stream from the interior beyond the Cape region (Table 3.13). Among white migrant households, the largest numbers of female heads were in the Eastern Cape stream, which was not large: for other parts of South Africa, the share of women heads was not far from that found in the CMA (Table 3.14). But for white families arriving from other countries 90 percent of households were male-headed, suggesting at least one beneficial demographic effect for this small and very well-off migration stream.

Among the black households in the sample, the dominant stream from Transkei was four percent more often male headed than the CMA established black population (Table 3.15). Likewise, the young urban stream from the Eastern Cape cities brought in nearly two thirds male headed families, and the small stream from the Western Cape was exactly two thirds male headed. However, the remaining small streams, from Ciskei and from South Africa's interior, were both predominantly female headed by wide margins. It would appear that the future impact of migration on household cohesion in the CMA may depend on how particular regional migration streams entering the black community expand or shrink in relation to total migration.

A second major factor involved in social dislocation and loss of capacity at household level is the married status of the household head. Tables 3.16-3.18 indicate marital status in relation to urban or rural origin of the household.

Results suggest that Coloured households in the CMA have numerous female heads partly because of the high percentage of widows, which reaches 18 percent of households reporting (Table 3.16). However, 12 percent of CMA Coloured heads had never married, a figure which includes single-person households as well as single mothers and families living in informal liaisons. White

households showed a closely similar distribution, but in spite of older average age the whites recorded fewer widows, a finding that seems to relate to better health care and lower risk of violent death outside the poverty bracket. For the black families, the proportion of heads who had never married reached 20 percent, leaving fewer married families and an intermediate number of widows.

Rural households entering the CMA reflected more widows in the white and Coloured groupings, but also lower numbers of heads who had never married, at 7 percent in each case. There is some reason to believe that households with irregular structure face greater difficulties in putting together the resources needed to organize migration from one region to another, in the same way and for the same reasons that very poor households have difficulties in migrating away from their home communities (Lipton, 1987). If so, the effects in terms of social dislocation of large numbers of women headed households in the Coloured migrant population particularly may be mitigated by the greater number of intact marriages at 69 percent. However, at 22 percent rural-born Coloured widows still come up as a large group in a difficult position socially and financially, and are likely to increase the city's total need for social assistance. In this light, the Coloured migrations stream does show relatively more coherent household structure than the established CMA population, but the relatively older age status of the households in this stream affects the number of women heads.

In the black population samples, more intact marriages also arrived with rural-born migrants, and fractionally fewer widows. However, slightly more migrant rural-born heads had never married than in the resident CMA population, due partly to the relatively young age of this migration stream.

In contrast, the urban-origin migration stream in the disadvantaged samples showed signs of social dislocation, with low levels of formal marriage in the Coloured and black groupings, and large numbers of heads who had never married (Table 3.18). At the same time, the relatively young urban-origin black stream included few widows, and the relatively low numbers of formal marriages partly reflect relative youth in relation to the characteristics of marriage in the black communities, which is often done in stages over a significant time period and can make formalizing marriage a late event in the life cycle of the household.

Overall, it seems that for the total Coloured population in the sample, migration may be pumping up the numbers of women household heads, which may be cause for concern from the standpoint of urban welfare and employment policy. However, the contribution of migration to the CMA Coloured population is not nearly as large as it is in the black grouping, where female-headedness is higher

and where migration appears to be contributing to the opposite effect. In this specific area, the contribution of migration is likely to be positive overall, though there are numerous gender-related ramifications of female-headedness which fall outside the scope of this report. For the relatively well-off white grouping, the effects of female headed status for widows are cushioned by insurance and forms of social provision less often available to the other race groups.

3.7.2 Labour and employment capacity: Age of head

The relation of migration to the age and employment chances of the CMA's total population is reflected in the ages of household heads, and appears in Tables 3.19-3.24 . It is widely believed that rural migration into a primate city brings in a relatively young and dynamic population, which is self-selected for its ambition and renews the working-age cohorts of the host group (Harris & Todaro 1992, Todaro 1972). However, it is also the case that urban populations tend to accumulate younger people, though this effect is often assumed to be due to the transfer of the rural young to the cities through migration (cf DBSA 1996). For migration to the CMA, rural migrant households sometimes seem to be old in relation to the host grouping, and may have moved under duress, due to job shedding in the farm sector which hits older workers first. In this light residential migration need not necessarily increase the labour capacity of the city as a whole by bringing in younger workers.

Comparing Table 3.19 for the CMA-born population with Table 3.20 and Table 3.21 for the migration stream from the rural and urban sectors respectively reveals that ages differ substantially. The rural-born migrant Coloured population appears as only slightly older than the host CMA grouping, while the urban-born migrant Coloured population was more concentrated in the prime working years from age 30 to age 49, with 50 percent in this age bracket, against 44 and 42 percent for the others respectively. However, for the white population differences were very marked. While only 33 percent of the local-born white heads were in their prime working years, for the rural-born stream this figure declined to 16 percent, with 76 percent aged 50 and above. The trend for the urban-born white migration stream from outside the CMA was opposite, with 46 percent in the prime working cohorts and just over half over the age of 50.

The black local-born sector also came up in the data as younger than the rural migration stream by a wide margin. Nearly 70 percent of the CMA-born black household heads were in the 30-49 age cohorts, comparing to 60 percent for the rural stream and 74 percent for the urban migrants. In this light the black population as a whole is still by far the youngest in the CMA, but this effect is not due to younger rural people moving to the city. Instead, the urban-born black population is intrinsically younger, and the effect of the very young stream

coming into the city from other urban areas does not counterbalance the main flow of relatively older people from the rural sector.

It follows that the combined effect of outside migration for the CMA black population is to raise the average age level. Much the same happens for the much older white population, which then contains a relatively small share of heads of household under retirement age. For the Coloured population, which is of intermediate age, migration is relatively neutral with regard to labour potential and possible engagement with the labour market.

At the same time, the city's possible needs in relation to social services concerned with retirement and old age can be partly estimated by inspecting the tail of the age distribution, representing household heads over 65 years of age. For the Coloured grouping, 17 percent of locally-born heads fell into this bracket, compared to 24 percent of the rural migration stream but also to 28 percent of the urban-born stream, which was otherwise relatively young. The Coloured population's need for social and health services involved with old age therefore appears to be increased across the board by migration, though the relevant streams are small and the effect overall is not great.

For the white population, people of retirement age are a major constituency in their own right, who are inclined to demand a high level of public and private old age services. Migration feeds this industry directly, though the force of the rural-origin migration stream in raising age levels for the retirement grouping is partly balanced out by the urban-origin stream pushing the other way. About 27 percent of the locally-born white population was over 65 years of age, against nearly half the rural-origin stream but only 12 percent for the urban-origin flow. The impact of outside migration on the age structure of the CMA's relatively small white population appears to be significant.

Survey results suggest that the situation in the black population is less serious as yet in regard to old age services. The rural-origin stream is the main population component, and includes six percent recorded household heads over the age of 64. For the urban stream, two percent fell into this bracket, and for the urban CMA-born population sample none were reported. However, this demand can be expected to strengthen over the next few years as the young urban population ages and more rural-born migrants arrive.

The impact of migration on the overall age structure of the CMA population appears to be very large, for the black and white populations particularly: it is less strong for the Coloured grouping where migration is relatively much lower. White labour market capacity is significantly affected, though the outcome for the economy is not likely to be serious. The black population maintains most of

its heads in the prime working cohorts in spite of the greater average age of the large migrant stream and its strong effect on black age distribution overall. Only the Coloured population - for which total migration was fairly low and age differences were not great - seems to witness no obvious effect on its age structure through migration. Overall, it would appear that in terms of human resources and labour capacity, the CMA may want to give thought to making a greater effort to attract urban-born migrants from outside the municipal boundary.

3.7.3 Labour and employment capacity: education and employment of head

The relative capacity of the different migration streams for the CMA's job markets is most directly reflected in education levels, which largely determine the job bracket that given migrant households can aspire to. It appears to be the case in the CMA as in South Africa's other large cities that the market for relatively low-quality jobs and unskilled labour is overtraded, while there may still be relative shortages for higher-level jobs requiring a solid educational background and perhaps further training and qualifications. How far the arriving migration streams find a foothold in the job market is likely to have a great deal to do with future prospects for the expansion or reduction of poverty, as well as for access to the housing market at an acceptable level. At the same time, arriving migrants necessarily compete with the locally-born population of the CMA for available jobs: how successful these groupings will be against each other in the job market depends on the relative employment capacity of the local and migrant households. A little further down the line, the size of the metropolitan unemployment pool links directly to the city-wide prospects for crime, social dislocation and public disturbances. These last factors in particular can be expected to rebound on future investment prospects, and on the CMA's chances for a globally competitive role. Migrant and local-born capacity in relation to education levels and employment therefore merits examination in depth.

3.7.3.1 Education and employment for the Coloured grouping

Overall levels of education in the locally-born Coloured population are moderate, and rank below the qualifications of more than one outside migration stream. More than two thirds of the CMA Coloured sample heads of household reported education levels of Standard 6 or above, but only 16 percent said they had obtained their matric. Nineteen percent recorded some kind of post-school qualification, including diplomas and training courses which do not necessarily require matric first (Table 2.7).

Against these qualifications, over a quarter of the Coloured heads born in the CMA indicated they had levels of schooling below Standard 6, and six percent - mostly old people - reported no education at all. None said they had stopped at Sub A or B. This group below Standard 6 would appear to be mostly functionally illiterate, at a disadvantage in the job market.

By comparison, heads originating in the relatively old migration stream from other parts of the Western Cape had much less education. Thirteen percent had no education, and two percent had stopped before Standard 1. Nearly 60 percent reported less than a standard 6 education, suggesting functional illiteracy, though ten percent had reached matric level and seven percent had some post-school qualification. This stream makes up most of Coloured migration overall, and does not appear to add to the overall employment capacity of the CMA's Coloured population. In terms of the classic understanding of rural to urban migration, this stream may represent the best educated slice of the Western Cape rural Coloured population of the time, but an advantage in capacity relative to other households from the same source region is not enough to make this grouping educationally competitive with the urban born grouping overall.

The same does not hold for the rest of the migration stream. Other outside migration streams were smaller but brought higher qualifications into the city. For the Eastern Cape stream from the farms and cities, no households reported that the head had no education, and less than a third overall recorded less than Standard 6. Forty percent indicated Standard 6-9, but nearly a third had obtained their matric, and 30 percent said they had a post-school qualification. For heads coming from elsewhere in South Africa even fewer had a Standard 5 or less, and nearly as many had matric or higher. That is, for these migration streams functional illiteracy was between 20 and 30 percent.

These two streams from outside the Western Cape together represented less than half as many households as the Western Cape stream alone. At the same time, these two streams make up an increasing share of recent migration, while the stream from Western Cape has declined. Depending on the education standards of the city Coloured population of the time, it looks as if early migration may have brought down the overall capacity of the CMA Coloured population in terms of educational fitness for the job market. However, more recent migration includes a higher proportion of better-educated migrants from further away, who could in principle out-compete the established Coloured population of the city. Since 1995 these well-educated streams from outside the Cape have outnumbered the Western Cape migrants, but total numbers of Coloured migrants from all sources have been so small as to be insignificant, and no real trend can be established.

If the possible effects on employment are considered, it appears that heads in the CMA-born population are in fact more often employed than those from the Western Cape outside the metro boundaries, but much of the difference is accounted for by a higher percentage of retired heads in the Western Cape migrant category (Table 3.22). However, the percentage of currently unemployed heads in the CMA grouping is also lower, at six percent against ten percent, and four percent of CMA-born heads are recorded as self-employed, against none in the Western Cape grouping. Results here suggest that education capacity may have a direct effect on the household's chances in the labour market.

However, the relatively well-educated migrant households from the Eastern Cape reported an even larger share of retired heads, and roughly parallel levels of employment, unemployment and self-employment with the Western Cape grouping. At the same time, the stream from South Africa beyond the Cape goes the opposite way, and reports a distribution of employment, unemployment, and retirement which closely resembles that for the CMA-born category, but does not suggest a superior level of employability.

In this light, it appears that the relationship between education and employment for migration is not simple in the CMA sample population, and it looks likely that the urban-born population may have an across-the-board advantage in urban contacts and information access weighing as much as education as a factor in determining access to jobs: it is also possible that the relatively urban stream of Coloured migrants from the rest of South Africa is more competitive in an urban context than the households arriving from the Eastern Cape, who resemble those from the rural Western Cape in coming mainly from farms. If this is so, origin may outweigh education as a direct determinant of success in the CMA job market for the Coloured population, and further analysis may shed more light on this point.

3.7.3.2 Education and employment for the white grouping

For the white population, levels of education for household heads were not as high as might be anticipated (Table 2.7). Less than half the CMA-born sample had reached matric or higher, though 38 percent claimed a post-matric qualification. Seven percent of heads reported less than a Standard 6 education, implying functional illiteracy, though none said they had stopped at Sub B or below.

White household heads who had migrated into the city from other regions of the Western Cape recorded higher levels of education than those who were born in the CMA. Nearly two thirds of this sample grouping had obtained matric, and

56 percent had qualifications beyond this level. None of the households in this stream reported education levels below Standard 6, reflecting the better educational opportunities open to whites in the Western Cape as well as the higher levels of urbanization among whites outside the CMA relative to the Coloured households.

The migration stream from abroad was the most educated of the white samples. More than three quarters of the household heads from other countries had a matric education or better, and nearly 70 percent reported some post-school qualification. Whites migrating to the Cape Town metro area from other parts of South Africa showed a very similar education distribution to that for the migration stream from other countries, but noted fewer post-school qualifications. Household heads from the Eastern Cape farms and cities also recorded about the same distribution of education levels up to matric, but fewer still had gone on to qualifications post-school.

All the white migration streams entering Cape Town from outside the city then seem to help raise the overall education level for the metro area in relation to the levels of education found in the locally born population. However, the migrating white households were relatively older than the local households and most were not in their prime working years. In this light their contribution may be in terms of investment and assets brought with them and capacity added to civil society along with relatively specialised elite skills, while their impact on the broader job market may be less than their share of the white population would otherwise suggest.

Table 3.23 gives the employment status of white heads of household, and confirms the high percentages of retired white heads in all streams already noted. However, the highest shares of retiree white heads came from the Western and Eastern Cape migration streams, with the CMA-born sample in the middle of the distribution. The category from other parts of South Africa beyond the Cape reported relatively fewer heads retired, while for the foreign-origin heads less than a quarter were retired although they were reported rather older than most CMA whites. It appears that many or most of the foreign-origin white heads of household come to the CMA intending to work rather than to retire.

Actual levels of employment ranged from 30 percent for the Eastern Cape stream to 35 percent for the grouping born in the CMA, but rose to 59 percent for the foreign-born category. Levels of self-employment varied from 6 percent for the other-South African stream to 14 percent for the foreign-origin stream.

On the other side of the spectrum, unemployment was recorded as almost non-existent for the white grouping as a whole, with three percent among the CMA-origin heads and 9 percent for the category from other parts of South Africa. No other white sample grouping reported any unemployment. In this light it appears unlikely that there is serious competition for jobs between whites born in the CMA and those migrating in from outside the city. All white migration streams appear well-placed for employment, and at a low point in the business cycle it still appears that even less educated white household heads are usually able to find work in the CMA.

Though it is not clear how far high rates of retirement may relate to job losses or difficulty in finding work among older heads of household, low unemployment overall makes it unlikely that these factors are important in what seems to be a very strong job market for the skills white household heads are able to supply. These employment levels offer an important clue towards what determines high rates of white migration to the CMA.

3.7.3.3 Education and employment for the black grouping

Education for black heads of household is represented in Tables 2.7. The relatively young heads born in the CMA reported somewhat higher levels of education on average than heads in the rather older Coloured grouping. About 55 percent had obtained Standard 6-9, against 29 percent with matric or higher. Sixteen percent had less than Standard 6, with two percent reporting no education at all. Against these levels, the small Western Cape black migration stream appears as better qualified overall, with two thirds at Standard 6-9 and only 8 percent with Standard 1-5. None said they had only Sub B or no education at all, though at 25 percent slightly fewer had achieved matric.

By comparison, the several streams from the Eastern Cape and from other parts of South Africa appear in the data as considerably less educated, though also very varied. The stream from the former Transkei homeland comes out as least educated for the Eastern Cape sending areas, with Ciskei migrants slightly better off. The Eastern Cape urban areas were considerably better off, and approached the education levels of the local-born CMA black population. Migrants from other parts of South Africa averaged a little below former Transkei, though they had fewer uneducated people and more who had reached matric. However, the best educated migrant fraction may be the three respondents from other African countries for whom education data was recorded, where two out of three said they had both matric and post-matric qualifications.

For Transkei, 11 percent of heads reporting said they had no education, and another two percent recorded Sub A or B only. In comparison, 9 percent of

Ciskeian migrant heads recorded no education, and three percent for the Eastern Cape cities. Forty percent of Transkeian heads were said to have Standard 1-5, against 42 percent with Standard 6-9 and six percent with matric. In this light, more than half the migrant Transkeian household heads are probably functionally illiterate. Heads in this grouping are likely to be competing for the CMA's limited pool of unskilled work, and would probably have difficulty finding and holding jobs above the unskilled level without additional training.

In the case of the Ciskei grouping, about 41 percent were likely to be functionally illiterate, against 41 percent with Standard 6-9. Another 18 percent had obtained matric, three times the level reported for former Transkei. For the Eastern Cape urban-origin migrants, less than a third had not gone as far as Standard 6 and were probably functionally illiterate. More than half had Standard 6-9, and 20 percent reported matric. This urban Eastern Cape stream comes closest to the education levels of the CMA-born grouping, but still hovers a little below.

The very small stream from other parts of South Africa appears to be as much as 57 percent functionally illiterate, with 14 percent reporting matric. However, with only seven cases recorded, no clear picture can be obtained, and this stream appears relatively unimportant in numerical terms.

In this light it looks as if all migration streams entering the black population of the CMA are likely to bring in rather lower educational levels than those already found in the locally-born metro population. Functional illiteracy, relatively manageable at 16 percent for the local-born population, comes up to more than 50 percent for the migrant population. Results here reflect significantly weaker educational opportunities for the disadvantaged in the other provinces of South Africa, and point to a probable need to provide education support and supplementary training to the black migrant population on as large a scale as can practically be managed in order to mobilize employment capacity.

At the same time, in so far as the present township population represents the second or third generation descendants of families from the same Eastern Cape source areas, findings suggest that the model of educational and other service provision which was followed in the past by the Cape Metro administration has actually been relatively successful in introducing a rapid education transition. For the future, questions cluster around the effects of migration in relation to burgeoning overpopulation in the black township schools, and also around the quality of education being brought on board for the informally housed black population as it continues to flow into the CMA.

Outcomes in terms of employment are significant -- highest employment levels are found in the small but educationally advantaged Western Cape migration

stream, with 75 percent employed heads of household. The Eastern Cape urban stream scores one percentage point ahead of the locally-born CMA black grouping, at 70 percent employed as against 69 percent. The few household heads from other parts of South Africa ranked fourth with 63 percent employed, trailed by Ciskei at 59 percent and the main grouping in former Transkei at 56 percent.

Self-employment was fairly evenly distributed and averaged 11 percent. As noted earlier, few black heads of household were retired and very few women heads did not work, making up a picture of very high commitment to the job market in spite of - or because of - very low average wages.

The other side of the mirror is the unemployment rates recorded. Unemployment here (heads from other parts of South Africa) was highest in the otherwise well off Western Cape stream at 25 percent, followed by Transkei at 17 percent, Ciskei at 14 percent, the local CMA population at six percent and the urban Eastern Cape stream at five percent.

Results for the black population samples seem to suggest that employment and unemployment for black households follow education capacity more closely than seems to be the case for the Coloured sample grouping. The migrant categories best off for education levels - the Western Cape stream and the urban Eastern Cape grouping - also appear as best off for employment, and seem to come in ahead of the locally-born black population, which is educationally on a similar level to the Eastern Cape urban category though not as well off as the Western Cape grouping. In this case there seems to be no built-in local-born advantage regardless of contacts and local knowledge, and the most-employed categories are both migrant.

However, the migration mainstream from the former Transkei trails far behind for employment, more than a third worse off in the job market than the leading Western Cape stream, and nearly a quarter worse off than the locally-born CMA-origin grouping. In terms of actual unemployment, at 17 percent the Transkeian migration stream is nearly three times as badly off as the CMA grouping at 6 percent, and more than three times as badly off as the Eastern Cape urban stream at five percent. Trendlines here also follow education levels. But it is important to note that at these levels of unemployment the Transkeian migrants may still be more than twice as likely to have a job in the CMA as their counterparts who stayed at home in the Eastern Cape, where unemployment rates are reported as high as forty percent (DBSA 1998c).

The implications for continuing population inflow from the Eastern Cape are evident. Likewise, it appears probable that the CMA will continue to face

unemployment rates in the majority migration streams of 15 percent or more for the foreseeable future. While these levels are likely to be low in relation to the rest of South Africa, they would still be high enough to carry the potential of urban civil disturbance and the certainty of crime.

3.7.4 Wealth and poverty: outcomes as income quintiles

The various factors involved in household capacity play out in relation to where the household stands in relation to others. Tables 3.25 - 27 locate the different race groups and migration streams in relation to the income distribution in quintiles for the total sample.

In general, the locally-born CMA population seems to have an advantage in engaging the job market which is not always overcome by better education and household capacity among the better qualified migration streams. However, the non-Cape, other-South African Coloured households did better overall than the local-born grouping, as did the foreign-born and Western Cape-origin whites and the Western Cape-origin black migration stream. Streams that reported lower income than average included Coloured households from the Eastern and Western Cape, white migrants from the Eastern Cape, black migrants from the Eastern Cape former homelands but not from the Eastern Cape cities, and black migrants from other parts of South Africa beyond the Cape.

The Coloured locally-born grouping seems to reflect the education distribution in how it appears on the income distribution by quintiles (Table 3.27). However, the income distribution is more continuous - and lower - than the education distribution, which clusters at the middle level between Standard 6 and Standard 9. A quarter of locally-born households appear in the bottom quintile below R 1000 per month, and 16 percent are located in the second-lowest, which stretches up to R 1300. Less than a quarter earned more than R 1800 per month in the highest quintile, corresponding fairly closely to the share with matric or higher qualifications. For the less educated Western Cape migration stream, a third or more appear in the lowest quintiles, and seven percent reach the highest quintile, again mirroring the education distribution.

However, the Coloured urban stream from the Eastern Cape recorded 72 percent in the lowest two income quintiles in spite of education levels competitive with the locally-born population, followed by a gap in reported income, and then by 29 percent in the highest income quintile. In contrast, the stream from other parts of South Africa had 42 percent in the two lowest quintiles and 50 percent in the two highest quintiles, ahead of the locally-born CMA grouping and all other

streams. The share of Eastern Cape heads who were working was about the same as for the other groups, and it is difficult to avoid the prospect that there are likely to be migration-related differences in how the Eastern Cape urban, rest-of-South-Africa and locally-born groupings interact with the job market. At the same time, the Coloured migration streams from outside the CMA seem to show a more strongly bimodal distribution of incomes than the locally-born grouping, with low-income and high-income sectors that are related to but not fully determined by capacity factors such as education and age.

In the white population, 71 percent ranked in the top income quintile, with 16 percent in the second highest and 13 percent distributed across the lower rankings (Table 3.25). Migration streams did not differ greatly in their overall income distributions, but the whites arriving from foreign countries had the largest share in the top quintile at 89 percent, against 79 for the Western Cape stream and 66 for the locally born CMA population. Differences here tended to follow the education distribution, and especially that for higher qualifications.

However, the white migration stream from the Eastern Cape farms and cities showed a distinctly poorer income distribution than the other white groupings, with 28 percent in the lowest two income quintiles, against 9 for whites overall. Only 43 percent of Eastern Cape whites scored in the top income quintile. This stream had higher levels of general education than the locally born CMA grouping, and fractionally better access to post-matric qualifications, but was largely of rural origin, contains a large number of female heads, and again does not seem to connect effectively to the job market.

Income quintiles for the black population are presented in Table 3.26, and show a range of economic levels among the migration streams. Overall, 21 percent fell into the lowest income quintile, and eight percent reached the highest quintile. The local-born township population did better, with 15 percent in the lowest and highest quintiles respectively, but the Western Cape black migration stream did better yet, with ten percent in the lowest quintile and 20 percent in the topmost. These results follow the education distribution. The other migration streams, from the former homelands and cities of the Eastern Cape and from the rest of South Africa, did less well. Though the Ciskei stream was better educated than that from the former Transkei its households recorded lower incomes, with 47 percent in the lowest quintile. For the Eastern Cape urban areas, with slightly lower education credentials than the CMA township-born grouping, income levels were also similar but slightly lower.

In general it appears that there is some level of home-ground advantage for the CMA-born population in most cases. Put another way, migration streams entering the Cape Town metro area appear to need to be better qualified than the

locally established population in order to do as well in penetrating the job market and supporting their families. Migration streams from rural areas, and those with large numbers of households run by women, may also face a disadvantage which is not wiped out by education.

4 Movement inside the city - between settlement types

4.1 Movement between settlement categories

For the CMA migration sample, migration and on-migration are the general experience. Only six percent of 991 sample households reported that they had never moved from their community of origin. A third said they had made one move, and slightly fewer reported continuing on to two stops. From this point on-migration drops, with 13 percent recording three moves, eight percent four moves, and 12 percent mentioned five or more stops².

In the Metro population, mobility rates seem to differ significantly by race group. Particularly in the case of the black respondents, rates of movement also differ by the type of community in which the respondents were living.

4.1.1 Coloured and Indian urban migration in the CMA

For the Coloured and Indian respondents, most movement took place within the formal Coloured townships (Table 4.1). In all, 22 percent of Coloured respondents had entered the CMA from outside the city. Those who had come from other cities or from farms and small towns accounted for 8 percent of recorded residential moves, against 80 percent which involved the Coloured formal townships. However, Coloured / Indian on-migration also interacted with former white residential areas, accounting for 9 percent of total moves. Movement into Coloured sectors of the mainly black informal settlement areas was less common in respondent histories, and represented three percent of total sample mobility for the Coloured/ Indian grouping. In this light, it appears that most Coloured residential movement in the CMA is local and takes place within the existing Group Areas-designated townships, although there is some

²These figures may be low in total: it appears that not all moves made before arriving in the CMA have been fully reported in all cases. Moves here are defined in terms of a permanent or semi-permanent residential move from one named locality to another: moves within a named locality are counted as local movement and not as migration.

interaction with formerly white residential areas and with the existing informal areas.

The Coloured and Indian population was also relatively stable in terms of on-migration. Over half the respondents reported only one residential move up to the date of survey, and 78 percent recorded no more than two moves. The average number of reported moves per respondent was 1.7. In this light the Coloured samples were the least mobile of the CMA's major race groups. However, this sample was intermediate in age, and still retains on-migration potential.

4.1.2 White urban migration in the CMA

White household migration was widely spread by comparison. White households in the CMA had much greater financial and information resources than the Coloured households, and appear much more shallowly rooted. About 89 percent had entered the CMA from outside, and 20 percent of recorded moves were from other cities, small towns, farms or localities outside South Africa (Table 4.2). However, 76 percent of white respondents' recorded moves were within the white residential areas of the CMA, against 4 percent involving Coloured townships and a fraction of one percent involving the black formal townships. None were reported from the informal settlements. White CMA residents therefore seem to move widely in and beyond the CMA itself, but remain almost entirely in their former Group Areas, with a small amount of leakage into Coloured settlements.

White respondents and their households appear as highly mobile in relation to the other samples. Nearly three quarters reported more than one residential move, while about six percent said they had never moved at all. About 53 percent said they had made three or more moves, and 13 percent recorded five or more moves. The average number of moves recorded per respondent was 3.9. Whites were therefore the most mobile of the CMA sample race groupings, but much of their record of on-migration relates to the greater average age of the white population in relation to the other race groups.

White households have completed a large number of moves in their lifetimes, but appear to have used up their mobility potential and reached a stable situation in a high percentage of cases. Less than 30 percent of the white household heads in the CMA migration sample were in the main demographic window for migration at age 45 or less, and nearly half were retired.

4.1.3 *Black urban migration in the CMA*

Black urban migration in the CMA is more complicated as it appears in the data, and involves not only the formal black townships and informal settlements but also the hostels (Table 4.3). Very large migration flows have taken place from the cities and former homelands of the Eastern Cape into the CMA as well as more widely into the Western Cape, and 84 percent of the total black CMA sample originated outside the metro area. Migration involving cities, farms and former homelands outside the Metro was given at 10 percent of recorded moves, but is likely to be underreported.

In addition, the black grouping was the youngest component of the CMA's population by a wide margin. Two thirds of the households heads in the informal areas and hostels samples were 45 years of age or less, ensuring that most resident black families were still in the demographic migration window at the time of survey and were likely to move again.

Migration involving the formal black townships accounted for 36 percent of moves recorded for the black population, against 47 percent involving the informal settlements (Table 4.4). Movement into hostels was only two percent, as the hostel population appears to be relatively stable at any given time (Table 4.5). The Coloured formal townships accounted for six percent of moves by black respondents, and the white residential areas for three percent. Most movement by black respondents in the CMA therefore involved the former black Group Areas and the informal areas which have been established on unoccupied land for the most part not planned for low income occupation.

Less than half the black respondents who had moved reported making one move only, but 78 percent reported not more than two moves. Exactly a quarter had made three moves or more. The overall average number of recorded moves per black respondent was 2.1, but for informal areas residents it was 2.0, for the formal black townships 2.4, and for the small sample of hostel residents 1.2.

The greater average number of moves for the black townships suggests relative instability in this grouping and greater stability in the informal areas, but results here are mediated by the relative ages of the different area samples, and by the role of the black townships as a temporary and permanent destination for people in the low income category. Though the difference was not large, household heads in the informal areas were younger on average than those in the formal townships, and had not moved as far down their potential migration paths (see Table 3.2).

In addition, the results summarised in Table 4.3 and 4.4 suggest two migration tracks occurring in the CMA black population. Table 4.3 shows movement by stops shifting its balance back and forth between the townships - which accommodate most people arriving from outside on a temporary basis as they enter and provide them with contacts and information so that they can establish themselves independently - and the informal settlements, which accommodate most of the migrating population on a long-term basis. Table 4.4 shows larger shares of the informal areas inhabitants arriving on their second move, and also after their third and fourth moves. It appears that the larger and more direct migration stream brings new families into the area from the outside via the established townships, and also picks up children of township residents who have not been able to find housing in their own communities, and from there leads directly into the informal areas. Once in the informal areas as their second stop, most of these people have not yet migrated again.

A second track goes further, and carries households migrating on for better living conditions as well as those forced to move on for any reason. Some of these households succeed in moving back into the better physical conditions of the townships, often into backyard accommodation (Dewar, Watson & Rosmarin 1991). However, over time some of these and other more marginal township residents may lose their grip and fall back on the informal areas. By stop 5, more of the population is accommodated in the informal areas.

In this light, the young and very large black migration stream will be critical to the CMA's future city planning. At the same time, within this stream the informal population of the CMA is not necessarily its most dynamic demographic sector. Most people who move into informal areas have not so far moved on again, though about a quarter of the black sample population did go on. Against this trend, the formal townships play a very dynamic role, helping to direct arriving families into the informal areas, providing many informal residents directly from their own natural increase, and also accommodating established families trying to find a better quality built environment than that of the informal areas

As outside migration continues to arrive, the future balance of movement between the townships and informal areas will depend on their relative capacity to take in more people as well as on the quality of life they offer. However, it will also vary in terms of what motivates people in the different streams to move on.

4.2 Reasons for moving

Motivation in relation to moving on and finding a suitable area is summarised across the race groups in two ways in the CMA migration dataset. Conditions wanted in the destination area for the first move away from the home community is given in Table 4.6. Tables 4.7-4.10 show reasons given for undertaking the move for the entire sequence of moves recorded. These two sets of results show different priorities in relation to their contexts. Aside from a general concern over access to resources, responses show considerable divergence, suggesting differences in priorities for the CMA racial groupings.

For Coloured and Indian respondents, the major concern reported in relation to the first destination area was access to transport and access to other resources, at 15 percent in each case. However, the main reason cited for moving was forced removals at 25 percent, which played a major role in establishing the Coloured townships. The high number of responses on this item seems to indicate that many respondents in this grouping would not have moved at all outside of compulsion.

Motivation in relation to moving on (Table 4.7) remained surprisingly flat across the sequence of moves. Coloured respondents prioritised being near to work at about 17 percent, getting the family its own house at 15 to 28 percent, and then obtaining a better quality house at 13 to 17 percent. Better living conditions and getting a private house came up strongly at the end of the sequence, as heads of household positioned themselves for retirement.

In the white grouping, safety was the main concern in the first move at 22 percent, followed by access to resources at 18 percent, land for residential purposes at 13 percent and affordable housing at 12 percent. Fourteen percent of whites also cited obligatory moves, which would include job-related required moves as well as expropriations under the last government.

Like the Coloured respondents, who also participate in a fairly developed and individualised housing market, the white respondents showed a relatively static set of concerns as they moved on. Their main priorities were being near work, at 32 to 37 percent, and getting a better quality house, at 11 to 24 percent. Home ownership as such was a lower concern.

For the black formal townships, the overriding initial concern was access to urban resources, at 39 percent of replies. Services and infrastructure ranked second at 20 percent, and transport accounted for 9 percent. Obligatory moves, mainly forced removals, were cited by 8 percent.

Reasons to move on in the black communities were much less stable than for the whites and Coloured groupings, and shifted direction as the household went through more moves (Table 4.9). At 49 percent in the townships, job search came up as a very strong reason for the first move only, then fell away 6 to 11 percent. Obtaining the family's own house took over, rising from 12 percent on the first move to 31 percent on the second, and remaining high. Better living conditions went from 4 percent to 21 percent on the third move, and rose to 47 percent by stop 5. Forced removals or obligatory moves rose to 21 percent for the last three moves recorded, while moves to join a partner or family declined from the first move and vanished by the third.

The informal settlements showed a very different set of responses for their first move, with safety dominant at 35 percent. Access to resources was a distant second at 17 percent, followed by jobs and infrastructure at 11 percent each, and affordable housing at ten percent. Forced moves of any kind were not often mentioned. Responses for the hostels also emphasized safety at 33 percent and noted forced moves at 20 percent, but then shifted toward respect for traditions and access to land at 15 percent each.

In relation to moving on, job search was the single overriding reason for the informal areas residents, starting at 77 percent for the first move, and then falling gradually from 37 to 17 percent as the household continues to move. Concern for owning a house rose as the priority of job search declined, starting at four percent and rising to 50 percent by the last move recorded. Few other issues drew any significant response. Unlike the townships, reasons given for moving in the informal settlements samples did not go on from home ownership to a general improvement in living conditions, though infrastructure was cited in connection with the first move.

From this composite picture, a poverty-related hierarchy of demands seems to emerge. In the black communities, reasons to move scaled strongly as households moved on. That is, demand for jobs was the single strongest initial reason in the black communities: with this demand coming under control, home ownership and then living conditions took over as priorities in the townships. For the informal settlements, with much more serious poverty and unemployment, job search remained a compelling reason to move, but at the end of the recorded sequence of moves was being overtaken by housing. Living conditions and infrastructural services seem to come later in the sequence, and it appears that the few families in the informal settlements reached the point where this demand took over as a reason to move. However, responses to the earlier question about priorities in relation to the respondent's initial move suggest that both transport as a means of getting to employment opportunities and physical infrastructure in relation to basic needs were strong priorities from early on, but

were less likely to figure in themselves as reasons to move, and were washed out on the second question by job search and housing needs.

For the white residential areas and to some extent for the Coloured townships, moving on appears to be less concerned with the immediate poverty-related demands of finding work and obtaining accommodation, and reasons given related to positioning the household in a more comfortable context where jobs and accommodation were already available. Though the Coloured households were much poorer than the whites and were still striving to secure their own housing, the main reasons to move for both groups were locating near work and improving housing quality.

These concerns were relatively constant. That is, reasons given for moving on by whites and Coloured respondents do not scale in relation to which needs have been satisfied, as they appear to do for the relatively poor black groupings: instead, all reported moves seem to respond to much the same general concerns for work access and quality of life.

4.3 Conditions and results of moves

Basic conditions which affect respondent mobility in the CMA include the household's stage of demographic development and the external situation of the move: that is, whether it was enforced or voluntary. Outcomes of moves were subjectively assessed by respondents themselves.

4.3.1 Conditions of moves

The demographic position of respondents when they began their migration careers can be estimated from their family situation at the time of the move. Coloured respondents were most likely to make their first move in a family situation, and least likely to move alone. About 15 percent first moved with their family of origin, and 52 percent with a partner or partner and children. Another 20 percent moved alone. For the other groupings more respondents moved alone. Whites approximated more closely to the impersonal model of urban mobility, and were much less likely to move with their parents, at six percent, or with families of their own at 35 percent. Instead, 40 percent of whites made their first move alone.

The black communities fell in between, and urban black family structures may be less tight and inclusive than for the Coloured samples. Thirteen percent of black respondents living in the townships at the time of survey reported that they made their first move with parents, against six percent in the informal

settlements and none in the hostels. For all three, from 26 to 30 percent moved first with a partner and children. In the townships and informal settlements 33 to 35 percent first moved alone, but for the hostels it was 50 percent.

In this light it appears that from one in five to half the respondents grouped by race and residence began their migration careers as single people without families of their own, with Coloured respondents the most family-directed and whites the most independent. Only in the Coloured samples did more than half the sample begin migration with fully formed family structures of their own: for the other major groups only about a quarter to a third had reached this developmental stage. Moving with parents was common only for the Coloured and black townships. However, it appears that migration in the CMA is a process that begins at a relatively early stage of domestic relations.

Toward the end of the sequence, by the fifth recorded stop most households, Coloured, white and black, were moving as family and children. Only a minority of respondents in any group reported making a fifth move with children only and without a partner, and only whites recorded any cases of moves made with a partner only and without children. It appears that later moves are usually family events, and in spite of small urban household sizes the CMA does not often see older people moving on their own.

Most but not all of these moves were made voluntarily and without compulsion. Table 4.11 gives the overall percentage of moves made under emergency or crisis conditions during the respondent's migration career to the point of survey.

For the Coloured and black townships, 15 and 17 percent of recorded moves were reported as made under crisis conditions, in most cases involving forced removals under the last government. At the same time, the risk of having had to make a crisis move at some time in the respondent's migration career was perhaps a quarter to two fifths for these groupings. Crisis risk for the other settlement categories appeared as lower, at 7 percent of moves and a risk rate on the order of one sixth in the informal areas, and as close to zero in the former white areas and for the hostels.

While it is clear that most of the enforced moves reported involved apartheid interventions into urban planning, some crisis moves involving what are reported as government forced removals seem to have continued to occur in the townships and informal areas. It is at least possible that some of these actually involve rollover upgrading, which displaces informal areas populations in order to improve infrastructure and housing in unplanned settlements before allowing the population to return. Rollover upgrading has been cited as a possible cause

of on-migration by Dewar, Watson & Rosmarin (1991), on the grounds that an unknown share of the displaced households may move on rather than return.

4.3.2 Results of moves

Respondents' evaluations of how successful their moves have been are given in Tables 4.12-4.16. Overall, all sample groupings saw having moved in a positive light, with an average of 57 to 70 percent of respondents at each stop saying they were better off as a result of having made any given move. However, the range for dissatisfaction was wider, and on average from four to 27 percent at each stop reported that they were worse off for having moved. Hostel residents, who had done very little moving, expressed the greatest satisfaction, and informal settlements residents the least. For other groups, average evaluations clustered closely at the level of two thirds positive.

For the Coloured and Indian sample grouping, satisfaction with having moved was higher for early moves at 73 percent, and then declined to 54 percent before stop 5 (Table 4.12). Two thirds overall said they were better off, and only 16 percent on average saw themselves as worse off after having moved. For the white grouping, overall satisfaction was average at 67 percent but negative evaluations were the lowest outside the hostels at 10 percent (Table 4.13). Satisfaction rose very slightly to peak at 70 percent on the third move, then slid to 61 percent by the fifth stop.

In the black communities outside the hostels, township residents claimed an average two thirds level of satisfaction for any given move, but also gave the highest level of negative evaluations at a mean 27 percent (Table 4.14). Expressed satisfaction started relatively low at 58 percent, rose to 73 percent by the third move, and then fell again to 58 percent by the fifth stop. Negative evaluations peaked at 37 percent on the fifth move.

The informal settlements respondents reported least satisfaction overall, at 57 percent for any given move (Table 4.15). However, satisfaction rose on a linear path as households moved on, from 52 percent on the first move to 67 percent at the fifth move. Dissatisfaction started at 33 percent on the first stop and peaked at 35 percent on the third. In this respect, relatively few families were still in the migration stream at the point when they began to see their on-migration as clearly positive.

For the hostels, very few respondents had made more than one move (Table 4.16). Their expressed satisfaction with their first move into hostel accommodation was very high at 73 percent, and in the few cases where there was a second move the feeling of being better off slid to 67 percent. Eight

percent saw the first move in a negative light, but for the second move there were not enough cases to pick up negative feelings at such a low level, and dissatisfaction over two moves averaged four percent.

In this light it appears that the Coloured grouping and the whites, as the most stable and least stable communities in the CMA sample, felt the greatest satisfaction with migration and settlement. With the exception of the very young families in the hostels the black communities felt less positively. Black respondents expressed much higher levels of dissatisfaction, reflecting lower levels of infrastructural provision and greater poverty and unemployment.

In both the black townships and the informal settlements the early moves that carry most of the migration stream tended to be seen as relatively unsatisfactory. Informal settlements residents who persisted with on-migration tended to reach a point of greater satisfaction, but never reached higher than the overall average for the other groupings. In the townships, longer migration paths did not reach more satisfactory perceived outcomes, and dissatisfaction was greatest for the last recorded move.

Results here may suggest significant on-migration potential pent up in the form of negative evaluations for first and second moves, where most of the CMA black population is probably positioned at the moment. Migration for these groupings has not resolved problems with quality of life, but for these relatively young households trying again after the second stop remains a very live option.

4.4 On-migration through the housing market

The kind of housing being occupied by the different sample groupings is summarised in Tables 4.17-4.22, and the kinds of tenure arrangement in use are given in Tables 4.23-4.30. In keeping with the observed changes in reasons given for moving as households move on, results suggest that migration is a more dynamic process for the black communities in regard to housing and tenure than it is for the other sample groupings in the CMA.

4.4.1 Housing

For Coloured and Indian families, and also for whites, the share of respondent households occupying houses and flats does not appear to change significantly with on-migration (Table 4.17, 4.18). For the Coloured townships, 65 to 77 percent of households were occupying single formal houses or semi-detached units, and these levels of occupancy changed little as households moved on. Occupancy of flats, informal structures, and backyard structures took up less space in the market, and also shifted relatively little over five migration stops.

Only occupation of single rooms shows a sudden rise on the fifth stop, as families decline in size and move toward retirement, and the very slight use of hostel accommodation drops out early.

In this light the housing market for Coloured families appears fairly static in relation to on-migration. Most Coloured families were accommodated in formal township housing, and there is little trend up or down in formal occupancy in relation to informal structures.

For whites a fairly parallel situation obtained. Occupation of single free-standing formal houses predominated over semi-detached units, but aside from a small linear rise in house occupancy against other accommodation there was relatively little change in their share of total housing for whites at 50 to 69 percent. Flats ranged from 25 to 30 percent of the market for white accommodation and remained fairly flat across on-migration, declining only slightly. Rooming in houses declined clearly, but represented a smaller share of accommodation even at the first stop. Other forms of accommodation were not significant for whites.

It appears that for whites and particularly in the Coloured townships, the housing market does not change dynamically in relation to on-migration, though individual families may upgrade or downgrade their individual accommodation significantly over their migration careers. Whites as a group showed a moderate trend toward more formal housing and less temporary contract accommodation, but for the Coloured communities even this trend was not easy to see. The greater range and higher standard of accommodation available to whites helps to account for why whites appear highly mobile in a fairly static market, while Coloured households seem to see little point in moving on even though early moves are appraised very positively.

In the black residential areas the situation appears different (Table 4.20, 4.21). In the formal black townships occupation of single formal housing fluctuates, trending up to 47 percent at the fourth stop and then falling sharply to 16 percent as families lose income and enter retirement. Informal housing appears to pick up most of the slack. It varies inversely in relation to formal occupation, from 14 percent to 36 percent. Living in single rooms rises steadily from five to 21 percent instead of falling as households move on, and may indicate a poverty dimension to township on-migration. Both informal housing and room renting rise sharply on the fifth stop, as formal single housing drops away.

Occupation of semi-detached units remained more or less steady around 17 percent, perhaps suggesting different conditions around this accommodation category. Hostel accommodation drops out from 11 percent on the first move as

younger people leave the hostels and look for more permanent housing in the townships. Flats were not a significant element in township housing.

The overall housing picture for township on-migration is one of significant activity and energy, but also suggests the fingerprints of poverty and desperation. Informal housing and room renting appear to take the place of a formal market in flat accommodation, and seem to indicate a high risk of dropping out of formal accommodation and into a position of marginality. With extreme pressure on existing formal accommodation and no market in flats, competition for existing housing resources can result in losing as well as gaining security in the struggle for places to live. In this turbulent and unregulated market, families appear to hang on tightly once they have obtained a place.

Falling satisfaction with township on-migration after the third stop may reflect families losing ground in a bitterly fought market. Formal accommodation never represents as much as half the accommodation market until its brief flare to 66 percent among the 22 percent of families which reach their fourth stop, and from there it crashes to 32 percent. That is, by the fifth move, the large majority of township families appear to have come to term with what they have, or otherwise lost their battle for adequate housing.

In the informal settlements, the picture is simpler and more uncompromising. Formal housing accommodation falls away from 18 percent at the first move, as families are unable to hold on in the formal townships and enter the informal areas, and is down to five percent by stop 3. Semi-detached units and backyard structures both remain fairly constant at a very low level, and hostel accommodation again falls from 11 percent on the first move to five percent on the third. Informal housing comes in to accommodate the overflow, rising from 61 percent on the first move to over 80 percent on the second and third. Very few cases are recorded beyond that point, but for the last six cases at the fifth stop all accommodation was in informal structures. The overall picture is one of families falling out of the planned areas as formal housing delivery fails to cope with either natural increase or migration.

The position of the informal areas in black housing in the CMA as a final resort for families unable to get control of formal housing appears clearly. However, qualitative material shows that many migrating individuals and households do not see any effective chance of obtaining better quality formal housing, and proceed directly to position themselves in informal structures that are as well located as possible. On this model, the informal areas are clearly set to continue expanding as upgrading falls behind.

In this light, the main struggle around black housing is still located in the townships, where existing housing stock is closely contested. As the only real alternative, the informal areas offer only one effective option, which is relatively unproblematic but also relatively unsatisfactory. To what extent a rental market would ease the pressure is not clear at this point, but qualitative results suggest that the demand is for housing ownership with a clear path to owner-managed upgrading.

4.4.2 *Tenure*

Tenure relations found under these conditions reflect how far formal house occupancy means secure ownership, and also the scale of temporary accommodation in its different forms. The rental market for Coloured and white households is relatively large and very significant, but falls away for the black townships and informal areas.

Table 4.23 gives the range of tenure types for Coloured and Indian township households, and Table 4.24 shows ownership, rental and other alternatives as directly opposed to each other. Ownership levels cluster around 43 percent, with little change till they crash to 26 percent on the fifth stop. Rental from local government trends down from 29 to 17 percent by the fourth stop, then rises sharply with the decline in home ownership. Private rental moves the other way, increasing from 17 to 37 percent over the five recorded stops. Rental from some local committee or other body remains steady but very low: it is not clear whether this category includes renting from gangs, often reported in the Coloured townships. Staying free of charge, either with employers or other parties, appears only for young families and at a very low level, and boarding or lodging is also relatively insignificant.

Overall rental options as reflected in Table 4.24 appear as more common than ownership at all stops, by a varying margin. Until the final stop recorded rental declines, while home ownership does not increase in proportion. Other tenure options cluster more or less steady at around 8 to 10 percent.

For the white housing picture, ownership as illustrated in Table 4.25 is consistently lower than it is in the Coloured townships. However, home ownership shows a linear increase from 20 percent to 50 percent with on-migration, showing that white families are improving their standing in the market as they move on, as Coloured families facing a restricted housing supply are not able to do. White family housing rented from local government holds more or less steady at a low level, while private rental housing declines from 44 to 33 percent as home ownership increases. In this sense, the individual housing

market for whites is working well over respondents' migration careers, while for Coloured families it is blocked.

In relation to the balance of owning and renting, Table 4.26 shows how rental and other alternatives for whites fall as home ownership rises with on-migration. Rental moves down from 48 to 38 percent but retains substantial market share, while other alternatives fall from 32 percent to 11 percent by the fifth stop.

In the black communities the rental option is less significant but still present, usually as an informal rather than formal option. At the same time, home ownership is reported at higher levels than in the white or Coloured areas, partly due to the informal nature of much black housing. Table 4.27 shows reported black township home ownership rising from 48 to 65 percent by the fourth stop, then falling abruptly to 48 percent again as the few households still in the migration stream lose work and approach retirement. How many of these transactions have been formalised with title deeds is not clear.

In response, rental from local government declines from 13 to five percent, while private rental takes over and rises from 15 to 32 percent. Much of this private rental market appears to be run informally, and is likely to be less secure than contract leasing in the white and Coloured housing markets.

Renting from local bodies and boarding are reported at insignificant levels, while staying free of charge first falls and then rises across the five recorded migration stops. Free of charge alternatives collectively account for from 7 to 19 percent of accommodation at any given stop, and mainly are used by either employees or relatives.

The overall level of rental in the black townships as against home owning is given in Table 4.28. The reported rental market is something over half the size of that in the white and Coloured areas, as ownership levels are reported significantly higher. Across the migration stops recorded, total rental options hold fairly constant till the fifth stop, while other options, mostly free accommodation, fall to meet the rise in reported owning. It appears that families moving out of social accommodation are still finding their way into what is perceived as a position of home ownership, but the legal security of their position remains to be explored.

For the informal settlements, Table 4.29 shows most families achieving informal or formal ownership, but other options providing for half to a quarter of the market until the last recorded move. In line with the two migration tracks noted in section 1 for the informal population, reported ownership rises steeply from 56 percent at the first move to 79 percent at the second as households position

themselves in the informal areas. However, for those who continue to move on, owning falls again to 63 percent for the third move, then rises to 100 percent for the six families who report a fifth move.

The role of either losing home ownership or failing to secure a home in the first place appears in this light as a likely major dynamic for the one in five informal areas households which continue with on-migration past their second stop. However, many of these households do report themselves as owners, and their motivations as reported earlier appear to have as much to do with improving their living conditions as with securing their own house.

In relation to tenure in the informal areas, Table 4.30 shows rental options falling away with on-migration, from 16 percent on the first move to six percent at the fourth stop, and then to nothing on the last. However, more of the slack which can be seen on the third move as owning drops from 79 to 63 percent is taken up by other tenure alternatives, which in the informal areas mainly seem to represent options for staying free of charge in terms of social obligations. It would be interesting to discover how many of these third moves are the result of splits within existing households, and whether they relate to gender factors in the housing market or in entry systems.

Overall, it appears that ownership at the low end of the market is seen as more widely distributed than in the more advantaged upper income groupings. However, most of this home owning in the poorer and more marginal communities is in relation to informal structures, which reported owners are able to provide for themselves without outside intervention. In the townships, it seems that many families in a position of owning formal houses may not have registered their title, but results are not conclusive here. At the upper end of the housing market in the white communities, families make extensive use of rental and seem to have the information and resources to feel secure in doing this. But for the Coloured townships, home ownership is both common and difficult to achieve, and rental options dominate in practice due to lack of housing provision.

5 Movement inside the city - between city zones

Once inside the CMA, migrants tend to gravitate as far as they are able to do toward benefits that they see as priorities. The prevailing body of theory draws attention to physical infrastructure and housing as critical factors (Dowding, John & Biggs 1995). These factors include transport access, and Abbott & Douglas (1998) draw attention to location in relation to work and transport as determinants of informal settlement on which policy has little direct effect. However, in the CMA patterns of settlement have been closely confined by apartheid legislation. Access to urban space is currently limited for migrant families by the CMA's inherited spatial structure, together with socioeconomic constraints which exclude the poor from better located areas in contact with the main activity spines (MSDF 1996).

Spatial planning is currently working to overcome the accumulated disadvantages of the past, but at the same time the poor have been working on their own to locate themselves as far as possible in areas that they see as advantaged in relation to their needs. While the Coloured and white communities have had areas provided and have settled mainly through formal channels and existing structures, the black migration stream has historically been provided for only reluctantly, and its speed and volume have been too high for formal routes to be a practical alternative. Instead, informal settlement systems have emerged outside the control of planning, and informal settlements have proliferated in the core and periphery of the city. Planning is concerned to prevent uncontrolled expansion to the north and south of the city, by both advantaged and disadvantaged communities. This section deals with how settlement has dispersed by race group across the city as migrants have grappled with barriers and options.

5.1 Movement into current area of residence

The broad course and sweep of city movement for the local-born and migrant population can be seen in how households have moved into their current areas of residence. To show how recorded moves are distributed across the entire population, areas where households live have been broken down into sixteen residential zones within the CMA (Table 5.1, and see Map 2).

5.1.1 Movement in the city as a whole

For the total sample population the most active areas were the central black and Coloured townships (Table 5.1). The townships have dispersed 16 percent of the total sample households to other residential areas as well as internally. The central industrial and residential areas - which accommodate a number of small

residential communities and industrial parks mainly serving the lower-income Coloured and white groupings - and the CBD followed, with 9 and 8 percent of households respectively. The southern activity spine and East Flats Coloured areas trailed with six and five percent of moves. All other residential zones accounted for less than five percent each, but collectively represented about a third of reported moves. However, the overall migration stream from outside the city accounted for the largest single category of moves, at nearly a quarter of the total. In this light, moves sourcing from inside the CMA came to just over three quarters of all the moves which brought households into their areas of residence at the time of survey.

Against this background, it appears that the most demographically active sectors of the city are the disadvantaged areas on poor quality land at the centre and southeast of the CMA. High activity here is partly counterbalanced by activity in the advantaged areas of the city's economic core in the central business district and stretching to the south along Main Road. However, more moves in total involve the disadvantaged areas, reflecting the demographic weight of the poor in the city as a whole.

Table 5.2 shows the overall pattern of flow between city zones as reflected in the random sample. The areas of highest migration activity are consistently located within given zones rather than as streams between them, indicating that most moves between named areas are fairly local and do not represent migration on scale.

The CBD is the most active area, with migration activity from all races. The high-income Helderberg node, the central industrial and residential areas of low-income housing mainly occupied by Coloured households, the western activity spine, the central townships and informal zone, the Atlantis/Mamre node, the southern peninsula and the southern activity spine have all sustained significant internal migration over time. Other areas of strong migration activity that form streams and flow between areas - from the central townships zone to the black Eastern Flats area, from Tygerberg North to the Brackenfell periphery, from the Bellville node to Tygerberg North and from the CBD to the southern spine - show up as carrying less traffic. In this light, there are few signs of large population flows playing out across the CMA.

5.1.2 Movement in the Coloured grouping

Movement within the CMA for the race groups is presented in Tables 5.3-5.5. For the Coloured population samples, the central industrial and residential areas were most active as source areas for recorded last moves at 20 percent, followed by the CBD at 16 percent. Tygerberg North, the southern activity spine, the Cape

Flats and the Atlantis node all accounted for 7-8 percent each as immediate source areas, followed by the Helderberg node and the East Flats Coloured areas (Table 5.3). Involving a large number of areas, Coloured residential migration in the CMA appears as relatively dispersed.

In relation to immediate destination areas reflected in the random sample, Coloured households have flowed into the central industrial and residential areas at 21 percent, into the southern activity spine at 20 percent, into the Brackenfell periphery at 14 percent and into the Cape Flats, Helderberg node and Atlantis node at 11 percent each.

The time frame for this urban migration activity is complicated, but Coloured intra-urban movement should be seen as gradual for the most part. Dates for migration tracks indicate that the most rapid intra-urban Coloured migration activity has been in the area of the southern activity spine, where over 70 percent of households made their most recent move during the 1990s. For the CBD, the central industrial and residential areas and the Brackenfell periphery, rates of movement appear to have picked up in the 1990s, but movement has been gradual and less than one in four households report having moved during this period. The last move reported for the Cape Flats and Helderberg samples was most often made during the 1980s. Some established Coloured communities in the CBD and central industrial and residential areas seem to have reached a maximum density and report less than 30 percent residential movement for more than twenty years.

Over time, strong local flows involving Coloured intra-city migration have taken place in a number of areas dispersed across the city. The largest recorded internal flows took place within the central industrial and residential zone, accounting for 10 percent of Coloured last moves within CMA. Movement within the Helderberg node and within the Cape Flats accounted for 6 percent of Coloured last moves in each case, and movement within the CBD node and the Atlantis-Mamre node represented another 5 percent each way. Moves within the southern activity spine came to 4 percent of urban last moves by Coloured households.

Streams running between city zones were less numerous than intra-zone movement for Coloured respondents. Starting from the centre of the city, the Coloured flow from the CBD node into the southern activity spine came to 6 percent of intra-urban last moves. Movement from the central industrial and residential areas into the southern spine added another 5 percent. Movement in the other direction - out of the southern activity spine into the central industrial and residential zone - represented 5 percent, and movement from the southern spine into the Cape Flats 3 percent.

At the periphery, the flow from the central industrial and residential zone into the Atlantis node made up 2 percent of recorded last moves within the city by Coloured households. The flow reported from Tygerberg North into the Brackenfell periphery took place over a shorter distance, and was stronger at 8 percent. Both these movements have been taking place gradually during the 80s and 90s.

Movement of Coloured families into the CMA from outside also concentrated in the peripheral settlements. Helderberg node recorded 31 percent of entry moves when they were also last moves, and Atlantis another 20 percent. These movements have also taken place over time. Current movement into informal areas is known to be taking place in Helderberg and other areas, but seems to be too localized to be strongly represented in the survey sample.

In this light, the central industrial and residential areas and the southern activity spine were most active overall for both in- and out-migration, but there has also been substantial activity in the peripheral areas where Coloured settlement is established, particularly on the north and west of the city. In contrast to the central industrial and residential zone, the advantaged western spine and also the northern spine recorded little Coloured residential movement. At the same time, there are indications that the more racially mixed southern activity spine has seen substantial recent Coloured residential movement, with a net inflow.

However, tabulation of migration tracking data appears to indicate that a substantial part of recorded movement in the Coloured communities involves movement between local sections of larger residential areas in order to find improved conditions locally, rather than movement from one part of the city to another. Coloured migration strategy often appears to be relatively conservative, and aside from the activity in the southern corridor there is little indication that the Coloured population is flowing strongly into new city zones in ways that would change the spatial balance of the city.

5.1.3 Movement in the white grouping

The white households showed another pattern of movement (Table 5.4). The most active source area for the most recent move was the western activity spine along Voortrekker Road, at 15 percent of recorded urban last moves. The southern activity spine, Helderberg and the peninsula region from Hout Bay southward were reported as source areas for 11, 10 and 10 percent of last moves respectively, followed by the northern activity spine and the Bellville node at eight percent each. Other areas reported less than five percent of last moves

each, for a total of 13 percent. Moves into the city from outside represented exactly a quarter of all moves to current areas.

Most of the intra-city moves reported by whites were relatively recent, though one long-established area reported less than 30 percent residential movement in the 1990s. The southern peninsula zone seems to have experienced rates of intra-urban white migration of over 80 percent since 1990, but most other white sample areas recorded rates of movement of over 50 percent during this period: the Bellville node and the northern spine sample areas approached 60 percent movement during the 90s. Across the city, it appears that less than 20 percent of white sample families on average moved in before the 80s, so that most city migration by whites can be read within this time frame.

Destination areas for the most recent move were roughly equally dispersed among the main advantaged areas. The Helderberg node was the most active area at 22 percent of all recorded last moves, closely followed by Tygerberg North, the western activity spine along Voortrekker Road, and the peninsula region. Each of these zones recorded 21 percent of last moves. The only other area to figure in results for the white grouping was the northern activity spine, which accounted for 15 percent of recorded last moves.

Seen in this way, it appears that the main activity spines with their location advantages remain the focus of white residential movement in the city. Within these areas, movement appears fairly dispersed. White CMA residents appear willing to move between areas, and they recorded less movement at a local level than the Coloured samples.

However, much of the recorded white urban movement took place within the defined city zones. Main flows identifiable for whites within the city included circulation within the western and northern activity spines, accounting for 13 and 10 percent of reported last moves. The Helderberg node recorded 13 percent of all white intra-city movement, and there was also internal circulation within the southern peninsula at 13 percent and within Tygerberg North at 3 percent.

Streams moving between city zones included flows from Bellville node and from the Western spine into Tygerberg North, at 9 and 5 percent of white intra-city last moves. Outflows from the southern activity spine went into the western spine at 8 percent, into the northern spine at 4 percent and into the southern peninsula at 4 percent. Movement into the CMA from outside concentrated in Helderberg and the southern peninsula, at 9 percent and 8 percent of total white last moves. It is not fully clear whether the Coloured grouping is partly replacing the white population in the southern activity spine, but there are some signs that such a trend may be in process.

At the same time, Helderberg and the southern peninsula are peripheral areas of up-market housing which have generated and received considerable migration activity. Along with Tygerberg North, there may be reason to suspect that white population is flowing into these areas from the central areas, though evidence is not definitive. Population appears to be moving out of the southern activity spine both to the south and to the north, while movement for the western and northern spines and for Helderberg is most often internal. Helderberg and the southern peninsula also represent destination areas well known to prospective migrants from outside the CMA, and are receiving migration from outside the city. However, migration into the southern peninsula appears to be more rapid than that for the Helderberg node.

In this respect, CMA planning concerns about possible residential sprawl to the north and south appear to be well-founded. However, the CBD and its immediate residential suburbs are not reported as areas of significant out-migration, and there seems to be no strong evidence to suggest that the white population is either leaving the city core or retreating into it.

5.1.4 Movement in the black grouping

City movement in the black population was highly concentrated in relation to its urban source areas (Table 5.5). It is also concentrated in time, and relatively recent. Given the history of clearances and legal barriers to black migration, the time frame for black intra-urban migration is short. With the exception of the oldest established townships in the central townships zone, the large majority of the black population has moved house at least once since 1980, and the majority - including more than 90 percent of the informally settled population outside the limits of the formal townships - have moved during the 1990s. Black migration streams within the city identified by the survey are therefore live and current for the most part.

Within the city, the central black townships were the dominant source of most moves, accounting for 36 percent of the last moves recorded. Another third came from outside the city into the CMA, leaving the East Flats black and Coloured zones as the source areas for the largest part of the remaining last moves at 7 and 9 percent. The remaining 14 percent recorded came from the Brackenfell periphery, the southern peninsula and the central industrial and residential areas mainly.

Immediate destination areas were more dispersed, but still limited. The central townships zone, which includes not only the townships themselves but also a number of important informal settlements, within itself accounted for 28 percent

of internal migration, if only moves within the CMA are counted. Migration flows circulating within the East Flats zone centered on Khayelitsha accounted for 7 percent of all recorded last moves by black households within CMA, and flows within the southern peninsula accounted for 4 percent.

The main outflows also came from the central black townships, and recorded streams from these went first to the East Flats black areas centered on Khayelitsha at 14 percent of internal black migration, then to the Cape Flats at 6 percent, to the southern peninsula at 3 percent, and to the Brackenfell periphery at 2 percent.

Streams can also be identified carrying black urban migrants from the East Flats to the southern peninsula at 2 percent of urban last moves, and from the East Flats Coloured areas to the southern peninsula and western flats at 2 percent in each case.

Recorded flows out of the disadvantaged core areas of the central townships and Cape Flats were then mainly to the southern peninsula informal settlements and to the northern informal cluster around Brackenfell/ Kraaifontein. Flows to these outlying informal sectors amounted to 5 percent of all last moves recorded for black households inside the CMA. By comparison, flows from the central township zone to the Cape Flats represented 6 percent of intra-CMA last moves.

However, limitations of time and funding did not allow sampling of informal areas at a level which would have included those in the northern activity spine or the Blue Downs periphery, and it should be assumed that the recorded flows from the central townships zone will also include out-migration to these peripheral areas, probably at similar or slightly lower levels. Both Blue Downs and the Brackenfell informal settlements are identified by Abbott & Douglas (1998) as areas with transport advantages where informal occupation is likely to consolidate and undergo expansion.

Against this background it appears that the city has opened up very little to its black population in the years since 1994. Destination areas are still strictly limited by the inheritance of Group Areas, now expanded slightly through informal settlement to include the CMA's northern, western and southern fringe areas. Informal areas have expanded slightly along the minor activity spine of the Klipfontein Road as it leads from the main central townships toward Langa, and have become established in unoccupied areas of the southern peninsula which have poor transport links, but have not succeeded in seeding themselves on the major corridors. The survey turned up almost no black migration involving the advantaged spaces of the main activity spines, and the little black

occupation recorded for the CBD node was in former Coloured areas that have become ethnically mixed.

Central Cape Town's high-value areas still seem to be effectively defended against the black poor, and informal settlement has been able to get a grip mainly at the far edges of the city and in areas already assigned for low-income groups and therefore not defended. The record of the Marconi Beam squatters in occupying higher-value privately owned land in the northern activity spine has not been duplicated elsewhere. Most of the city's intervention efforts have been directed at attempts to eliminate informal occupation by converting it into township housing, and little attempt seems to have been made to conform with the principles of the MSDF by making better located land available to the poor on an orderly basis.

The migration experience of the black formal townships population, the informal areas and the hostels sample population is summarised in Tables 5.6-5.8. Last moves into the township areas in the sample represented about 17 percent of all recorded moves into current accommodation. For the formal black townships, only two of the city zones were involved: the central townships and informal zone itself, centered on Nyanga and Gugulethu, and the black East Flats zone that includes Khayelitsha (Table 5.6). The relative confinement of movement within this extended core zone is very evident.

Khayelitsha is a very large area with numerous internal subdivisions in the form of named communities based on the planning delimitation: it acts as a major reception area for new migrants arriving from outside, and also accommodates a large part of this stream. Accordingly, results for the black East Flats zone show relatively little movement from outside the city direct into accommodation in Khayelitsha at 8 percent, but a great deal of internal migration from one named community to another, reaching 50 percent as new arrivals move on to get more satisfactory housing and location than their initial reception area.

In addition, results show Khayelitsha accommodating a 38 percent inflow from the older formal townships in the central townships and informal areas zone. Many of these urban migrants appear to be children of township residents unable to get housing in their community of origin, but others seem to be outside-born migrants who have been accommodated as sojourners in the older townships, but now need to find sites of their own which are not available in the crowded township areas.

For the townships zone itself, the largest amount of migration was internal, at 63 percent. Much of these represents movement into backyard accommodation from either formal or informal housing. Again, relatively little outside migration

is reported to be accommodated in the older townships straight from the rural source areas.

Though the peripheral informal settlements have in some ways been more visible, it seems clear that the nexus of formal and informal settlement involved with the central townships still takes in something approaching half the total migration into current accommodation for the black CMA population inside the city. It does this in conditions of serious overcrowding, that lead inevitably to demographic decompression bursts which establish new informal areas.

The situation for the informal areas is given in Table 5.7. Last moves into the informal areas represent more than a quarter of all recorded movement into current areas of residence. The most active sources of migration into the informal areas appear as the central townships themselves, the adjacent East Flats Coloured zone including the Phillippi industrial and informal areas, and the Brackenfell periphery, here perhaps standing in as well for the informal areas of the northern activity spine and for Blue Downs. These main sources of urban migration accounted for 41 percent, 27 percent and 10 percent of last moves within the city, and were followed by the southern peninsula, which represented 8 percent.

Migration from these sources flowed outward in a number of directions, but were recorded in the sample most often moving into the East Flats black settlements and into the Cape Flats to the west. Over a quarter of of all intra-city migration from the informal areas went from the central townships and informal zone into the Khayelitsha area in the East Flats black area. Seventeen percent of the city migration recorded went from the central township zone to the Cape Flats, and fourteen percent from the East Flats Coloured zone including the informal settlements at Phillippi to the central townships zone.

Other flows were smaller, with nine percent from the Phillippi area to Khayelitsha, and another 7 percent in each case from the Brackenfell periphery to the central townships zone, and from within Brackenfell to other informal settlements in the same zone. Five percent flowed from the Phillippi area to the southern peninsula. The focus of informal movement around the central townships and informal zone and the nearby East Flats Coloured and black occupation zones is very evident: only relatively small flows moved outward to the peripheral settlements.

Table 5.8 shows migration into the hostels, and delivers a relatively simple picture relative to CMA movement. Nearly the entire population of the hostels moved in directly from outside the metro area, with only one respondent having moved in from Helderberg. The role of the hostels as a first step into the city for

younger families and single men who have been able to find work through contacts appears clear from these results.

5.2 Urban movement in relation to employment

Much of the concern of current urban planning for the CMA centres on the issue of where the city population works in relation to its place of residence (MSDF 1966, and see also Abbott & Douglas 1998). There is confirming evidence in the study that place of work is a powerful determinant of migration choices, and it is clear that urban populations mainly dependent on wage work for support cannot locate so far from workplaces that transport costs, time demands and daily difficulties of urban travel make it impossible for the household to make ends meet. Tables 5.9-5.14 describe the relation between where households in the sample live and where their most senior employed member works.

For the entire sample, it appears that in the largest number of cases people living in the defined urban zones have found work in the zone where they live (Table 5.9). However, many members of the sample households still work in the CBD, which accounted for 24 percent of all employment for senior household workers.

In addition, 11 percent of the employees covered by the question were employed in the southern activity spine, another 8 percent in the southern peninsula, and six percent in each case in the Cape Flats, in Tygerberg North, and in the central industrial and residential zone. Five percent each were recorded in the western activity spine, in the Bellville node and in the Brackenfell periphery. Other city zones come up as relatively insignificant. At the same time, about 38 percent of sample households were not able to designate a senior worker, and these families appear to have retired, disabled or unemployed heads in most cases.

While the CBD drew in workers from many parts of the city - and particularly from the adjacent and well-connected southern and western activity spines, the East Flats black areas and the central townships and informal areas - it is clear that CBD employees were not found everywhere. The areas which sent workers to the CBD were either activity corridors structured around freeway access, or established townships with mass transit connections. The periphery of the city, including Tygerberg, Brackenfell, Helderberg, the southern peninsula and Atlantis, turned inward and residents tended in more cases to find employment locally if at all.

The average share of households without employees in the periphery areas was 40 percent, against 45 percent in the main activity spines and CBD. The central townships and informal areas and the East Flats/ Khayelitsha zone, with a

younger population with fewer resources to cushion their minimum level of needs, recorded only 28 percent of households without wage earners.

The most spatially isolated areas were the southern peninsula and Atlantis zones, where work within their local zone accounted for 72 and 86 percent of employees. At the same time, while households without employed members represented only 20 percent of the sample in the well-off southern peninsula zone, in the spatially marginalized Atlantis node nearly half the households were without anyone working. The Coloured townships in the central industrial and residential zone recorded the highest level of households without employment, at 62 percent. While these areas are in the physical centre of the CMA and were planned with access to industrial parks, they are located between activity spines and do not have optimum transport connections to any strong employment node.

5.2.1 Work, transport and residential location for the Coloured grouping

The location of employment in relation to where the household is living is presented in Table 5.10 for the Coloured sample population. Nearly half the households had no one working, and the CBD remained the single most important area of employment for the sample at 22 percent of employed household members. Fifteen percent of employed Coloured household members worked in Tygerberg North, 13 percent in the southern activity spine, 13 percent in the central industrial and residential zone, and 9 percent in Atlantis node. Seven percent reported working outside the CMA. However, nearly half the jobs held by Coloured workers were located in the city zones where the household was living at the time of survey.

In this light there are two possible ways of looking at the relationship between work zone and residential zone. The first is from the standpoint of the household, in relation to how close the workplace is to the household's own location: the second is in relation to the spatial structure of the city itself. This section considers work zone in relation to the household point of reference first in order to clarify aspects of the trip to work that affect the household, then looks at the location of work in terms of centre and periphery relative to the CMA to put in context its potential effects on city planning.

Concentrations of employment for the Coloured samples tended to be local, and often accounted for the majority of the zone's workforce. For the highly active southern spine, about a third of the zone's workforce as recorded in the Coloured sample were employed within the zone, but for the CBD itself the comparable figure was 69 percent. In Brackenfell periphery local employment came to 77

percent of senior household workers. In Atlantis, much more isolated to the north, local employment represented 86 percent of the workforce. For the central industrial and residential zone work locations were widely dispersed, and local employment was lower, at 43 percent. For Helderberg it was only 29 percent, while employment outside the CMA accounted for nearly half the local workforce. The Cape Flats sent the biggest part of its workforce to the adjacent southern activity spine at 40 percent, and only 20 percent worked within the Cape Flats zone.

It appears that in the Coloured communities the central areas disperse their workers fairly widely, with a minority locally employed, while the peripheral zones - farther from the transport routes for the CBD and main activity spines - concentrate their workforces in local nodes as far as possible. In the advantaged Helderberg node, most employment that was not local was nearby, but outside the metro boundary. Less than a quarter of the Coloured household workforce reporting was employed in the CBD, and these employees came most often from the southern spine, and then from the CBD itself. However, large commutation flows for the Mitchell's Plain area are not recorded in the random sample, and would probably raise the overall share of Coloured workers employed in the CBD.

In these respects the employment picture for the Coloured community is fairly concentrated by destination, and does not appear to depend on transport into the CBD to the extent that might be expected. However, transport is clearly a major factor for the badly located areas, and particularly for the spatially marginalized southeastern residential areas in the East Flats zone.

Turning to the location of work in relation to centre and periphery, Table 5.10 shows how work in the Coloured population samples is distributed from the centre to the edges of the city. With the CBD itself accounting for 22 percent of work localities, the central sector of the CMA represents another 35 percent. These zones for Coloured workers comprised the southern, western and northern activity spines, the central industrial and residential zone, and the central townships. The city's peripheral sector took in a fractionally higher share of workplaces at 36 percent, and included the zones at the edges of the city, consisting of the southern peninsula, Bellville, Tygerberg North, Blue Downs and the Brackenfell periphery, the East Flats Coloured areas, and the Helderberg and Atlantis nodes.

In this light it appears that commutation flows for the Coloured population samples move all over the city, and not only to the central areas. Better-off nodes on the outer periphery appear relatively successful in terms of providing work through local employment not dependent on arterial transport. Though the CBD

and central sector together outweigh the commutation flows to the outlying zones, the periphery outbalances either of the other sectors alone. Its importance resonates with the push of economic activity moving to the less dense, cheaper and less strictly planned outer parts of the city near the planned urban edge. In this light, there may be questions to ask around how the different city nodes laid out in the MSDF are intended to be maintained in a hierarchical alignment in relation to each other.

For future settlement and migration, the extent to which jobs are available either in the local area or in the most closely adjacent activity node are likely to be important factors, but location does not entirely determine access to work for sample households at present. Zones that contain established housing areas with poor access to existing transport routes appear as employment backwaters with large numbers of households with no one working, but advantaged areas such as the CBD and southern activity spine also recorded large numbers of Coloured households with no wage earners. Additional light can be shed on location and transport factors in regard to work by considering which areas return the highest wages to Coloured employees (Table 5.10), and how the costs of transport to work run for the Coloured sample areas (Tables 5.15 - 18). The mean monthly wage income of a Coloured employee in the CMA at the time of survey was roughly R 3000, against about R 6700 for white workers, but only R 1400 for black employees.

Of the city's residential and work zones, the Bellville node and the southern peninsula appeared to pay the highest wages to Coloured staff, with reported means of over R 7000 and over R 4000 respectively, but hardly any respondents worked in these areas and these figures cannot be taken as reliable. The work destinations with most workers reporting were the CBD at a mean of R 3100, the southern activity spine at R 3200, and the central industrial and residential areas themselves, which reportedly reached R 4800. By contrast, Atlantis/Mamre jobs paid very badly at R 1400, and Helderberg, Tygerberg North, and the western activity spine all returned averages of under R 2500, with very few workers reporting from these zones. Some of these jobs are in domestic work.

Working with the data from Table 5.10 it appears that for Coloured workers, available jobs in the economic core of the city in the CBD actually pay slightly lower wages on average than the central areas of the main activity spines and the central industrial and residential zone, which averaged out to roughly R 3200 monthly. Perhaps tellingly, the city zones that can be considered as falling in the periphery returned approximately the same average wage, putting them equal to the main activity spines and slightly ahead of the CBD: these areas included Helderberg, Atlantis, Tygerberg North and Blue Downs, which paid poorly, but also Bellville and the peninsula sub-region, which appear to pay relatively well.

However, it is probably true to say that in terms of the total numbers of jobs for Coloured workers reported, the areas with highest employment on the periphery were not the ones that offered better quality office and industrial work paying relatively better salaries. Overall, it still appears that the average Coloured employee in the central areas is likely to be better off than the average periphery employee.

The cost of the trip to work paid by workers in the Coloured townships helps to show how the city transport network relates to location and employment (Table 5.15 - 18). Reported trip cost was lowest for low-salaried workers, but an important fraction did not use public transport. Nearly 40 percent of employed respondents reported that they paid nothing at all to get to work, indicating a local-zone job within walking distance in most cases, though some workers used bicycles, caught lifts or ran private cars without counting running costs. The average monthly wage for these workers was about R 2300. In this light, workers who are employed locally are likely to be those with the worst-paid jobs.

Another 15 percent of Coloured workers reported a cost per trip of less than R 4.00, indicating a relatively short trip by public or private transport. For this category of employee, average salary was R 2700, indicating better quality jobs reached by travelling further. Monthly costs would vary between perhaps R 25 and R 90, or an approximate average of R 50. At this level, transport would cost the worker about two percent of his/her reported monthly wage (Tables 5.19 - 5.21).

However, the highest salaried workers were found in the intermediate category paying R 4.00 to R 10.00, at 23 percent. Monthly transport costs to work in this bracket would run between R 90 and R 220 for a daily commutation trip, with a very roughly estimated average of about R 150. For this employee grouping, monthly wages averaged R 4100, seeming to confirm that longer trips for the Coloured workforce are linked to better jobs and better pay. At R 150, transport costs would consume about four percent of the average worker's salary.

At the same time, the Coloured workers paying the most for their trip to work earned less than those in the intermediate trip cost bracket. Another 23 percent of employed respondents reported paying more than R 10 for the trip to work, or at least R 220, and the amounts involved varied substantially. The average monthly salary for this high-cost grouping was R 3400, and at a single point estimate of R 15 per trip to work, commutation would cost the employee something on the order of R 330, or roughly ten percent of his/her monthly wage. It is not fully clear why the workers in this category are travelling further for less money, but it seems evident that this high-cost transport grouping is

disadvantaged in relation to the transport system relative to those in the intermediate trip cost bracket.

Results here may help to support the MSDF principle that commutation to work is unnecessarily expensive for lower-paid groupings because of the inefficient placement of residential areas for the disadvantaged. However, whether worse-paid Coloured workers could reach better jobs if they could pay more for existing transport arrangements, or if they could do so if transport were easier and cheaper, is not fully clear at this stage. That is, it is not immediately evident how often the lowest-paid workers are trapped in their local areas by transport cost factors, or what proportion may be deliberately making a tradeoff in order to work locally, and/or could not find a better job by travelling further. At the same time, it does appear that reducing trip cost and/or trip time could shift employment locality outward to some extent or bring a larger number of potential jobs within reach, and would likewise release more of the worker's present salary for other uses.

5.2.2 Work, transport and residential location for the white grouping

Employment for the white population in relation to location appears in Table 5.11. In this race group, local employment was dominant over work in the CBD everywhere but in the western activity spine, which is perhaps the CBD's main residential feeder zone for white employees. However, over half the white households recorded no one employed at all.

At 21 percent of all jobs, work in the CBD had about the same importance for whites living in the rest of the city as it had for Coloured workers. For the western and northern activity spines, work in the CBD accounted for 44 percent and 20 percent of employed respondents, while work in the zone of residence represented 33 and 40 percent.

In the more isolated southern peninsula zone, local work accounted for 33 percent, against 11 percent in the CBD and 17 percent scattered in other zones. Tygerberg North and Helderberg node, also isolated zones, supplied local employment to whites at 54 percent and 75 percent, against 5 percent and 8 percent working in the CBD: in the case of Tygerberg, local employment tended to be in Bellville node rather than in the Tygerberg North residential areas themselves. The great majority of all recorded jobs held by whites were in the main activity spines and the outlying nodes, but 11 percent of white jobs turned up in the central industrial and residential zone, where most residential neighbourhoods were Coloured and many whites would commute in.

If they were not employed locally, white employees from the southern peninsula tended to work in the CBD, the Cape Flats and the southern activity spine, in that order. Those from the western activity spine worked in the CBD more often than they worked locally, the only residential zone where this was the case. A small share also worked in the southern activity spine and in the central industrial and residential zone. Those from the northern activity spine were also scattered, with less than ten percent in the CBD and small shares in the southern spine and the central industrial and residential areas. Tygerberg North was the most scattered area for work locality, with 45 percent of employees in Bellville, 18 percent in the central industrial and residential zone, and small shares in the north Tygerberg area itself, in the CBD, and in the Brackenfell periphery and outside the CMA. By contrast, Helderberg was more locally concentrated, with most workers in the local zone, and small shares in the CBD, in Bellville, and outside the CMA.

Overall, for the white samples as for the Coloured samples, just under half of all jobs were supplied in - or in the case of the Tygerberg residential areas, adjacent to - the zone where the household was living. In this light, less than a third of white employment fell outside the local zone and the CBD. However, as was the case for the Coloured grouping, the CBD appears as less than half as important as the local zone for white employment in total.

In relation to the structure of the city, the central zones - for whites, the main activity spines, the central industrial and residential zone and the Cape Flats but not the East Flats - accounted for 34 percent of jobs. By comparison, the periphery included the southern peninsula, the Bellville/Tygerberg/Brackenfell node and Helderberg, and provided 42 percent of jobs held by whites in the sample. As with the Coloured sample population, the periphery is now providing the largest single share of jobs to the white population, but still ranks well below the CBD and central zones combined. White commutation to work is less spread than that for Coloured employees, with only the Tygerberg North zone showing much scatter. Overall it appears that white workers live closer to their places of work than do Coloured employees, and that many of them work as well as live in the city's periphery.

With a priority on living close to jobs and in spite of relatively very good access to private and public transport in the former white settlement areas, 41 percent of white employees said they did not have to pay for transport to get to work, about the same share as in the Coloured sample population (Table 5.18). Results here suggest that not all the whites who live and work in the same city zone can walk to work or otherwise avoid paying for the trip. The average wage of this category was relatively low for the white samples at about R 4400 per month,

implying that locally available jobs for whites are not as well paid as some located at a greater distance.

Above this level, a small group of better-off white employees at ten percent of the total sample reported that they paid some amount under R 4.00 to get to work. If a point estimate is made as above of daily commutation and a cost of R 50 per month, at an average wage level of approximately R 7000, this grouping would be paying less than one percent of their reported wage income to reach their jobs. These workers appear to be moderately well off whites who have invested in living close to work (Tables 5.19, 5.22, 5.23).

However, the average monthly income for the intermediate-cost category was significantly less, while the group was larger and their trip to work cost them more. At the point estimate of R 150 per month and a much lower average income of R 4400, the white employees paying R 4.00-R 10.00 would be spending about three percent of recorded income on travel to work, a readily sustainable level of expenditure. These lower-paid white employees appear to have chosen travelling over moving, but are unlikely to meet serious financial problems as a result.

At 31 percent of the white sample population, the top bracket of travel costs for whites is occupied by a larger grouping of very well-paid employees earning nearly R 10 000 per month on average. In this category, even costs well above R 220 per month would appear to be sustainable at two percent or more of the recorded monthly wage.

In this light, none of the white employee groupings appear to be threatened seriously by the costs of getting to work in the CMA. Notwithstanding its spatial and planning implications, the commutation problem in the CMA seems to be under good control from the standpoint of the white employee and his/her household. The white sample population is highly mobile in terms of urban on-migration, and it seems that the advantaged white grouping is easily able to trade off commutation travel against on-migration to best convenience in ensuring ready access to the work location.

5.2.3 Work, transport and residential location for the black grouping

For the black population, Tables 5.12, 5.13 and 5.14 give the location of employment for the household's senior worker in relation to the black townships, the informal areas and the hostels. For the townships, over a third of the households reporting had no one employed, but families without workers were unevenly distributed. In the older central townships nearly half the households reported they had no one employed, but in the relatively new East

Cape Flats township where the sample was done only ten percent of households did not contain employed workers.

In the informal settlements, the overall frequency of families without employed workers was lower at 27 percent, but varied from nearly half in the well-established Brackenfell settlements down to three percent in the newer southern peninsula informal areas. For the hostels, nearly the entire resident household population had someone employed at 95 percent.

For the townships, the CBD was the single most important area for employment, but alone it accounted for only 21 percent of employees reporting, closely level with its representation among Coloured and white workers. The southern activity spine represented another 18 percent of the workforce reporting. The other major centres of township employment were the townships themselves, and the central industrial and residential areas adjacent. The townships together, including both the older central townships and the East Flats black township, accounted for 29 percent of household employees reporting. The central industrial and residential areas made up another ten percent, for a total of nearly 80 percent of reported work. Other employment zones were of minor importance.

In this light township employment appears relatively concentrated in space. Township workers either commuted to the CBD/ southern spine zones, or worked in or near the townships themselves. Few were found in other city zones. Local township employment was the single largest spatial category of work opportunity, but the CBD and southern spine together made up nearly 40 percent of work options. Other work areas were located close to the township home areas. This kind of work pattern would appear compatible with transport and residence constraints imposed under the last government, as outlined in the MSDF (1996), but also shows a strong preference for local employment unless preferential transport arrangements exist.

In the informal areas the CBD was not the key centre of employment: it accounted for only 11 percent of workers recorded, against 19 percent in the southern peninsula and 27 percent in the Bellville-Brackenfell-Tygerberg North node. However, the southern activity spine and the Cape Flats each accounted for a further 11 percent of informal areas workers. Otherwise senior workers in the informal areas were distributed widely around the city. Small numbers appeared in the central industrial and residential zone, in the East Flats Coloured townships, and in the western and northern activity spines. Very few said they worked in the townships themselves.

In this light it appears that black workers in most of the city outside the CBD and the areas closest to the main townships probably come from informal settlements. Black workers in the CBD/ southern spine were nearly twice as likely to come from the townships as from the informal areas, while jobs in the CMA's outer urban zones tended to be held on a localized basis by people from informal areas nearby. This kind of pattern looks in keeping with the location flexibility of informal settlement, which is able to move physically in pursuit of jobs. With the aid of taxi transport, informal residents seem to be exploiting the less rewarding but still important employment niche of work in the city's periphery.

That is, while the formal townships were deliberately concentrated by apartheid city planning and the informal areas have concentrated nearby, some of the informal areas have dispersed more widely. However, even workers from the informal areas in and around the townships reported more dispersion of work zones than did the township residents themselves.

For the formal townships, the CMA's central city zones outside the CBD made up 60 percent of work localities, with the CBD itself contributing a further 21 percent. These figures are boosted by the presence of the hostels, here counted separately, where all the senior employees recorded worked in the central city zones. For the townships without the hostels, work in the zones classed as the urban periphery represented 18 percent of reported cases. However, for the informal areas the central work zones collectively accounted for 35 percent of cases and the CBD for 11 percent, leaving 53 percent located in the periphery. In the light of the finding that households in the informal areas are also more likely to include employed household members than those in the older townships, it appears that the informal settlements represent the CMA's de facto attempt to solve the problem of bringing lower-income workers into contact with work opportunities which was created by enforced residential concentration in marginal areas under the historical apartheid city dispensation.

Against the average wage for black workers in the sample of R 1400, the average wage of township workers appears significantly higher at R 1840 per month. By contrast, the less educated employees from the informal settlements reported worse pay levels by a factor of nearly half, with an average monthly wage of R 993 month. Hostel workers did better with an average wage of R 1504 month (Tables 5.19, 5.24 - 5.29).

Considered by city zone, the formal township residents found the best wages close to home in the East Flats black township residential areas, reported at nearly R 3400 per month for ten cases. Most of these jobs appear to be civil service work, requiring significant qualifications. Outside the Khayelitsha

sample, the rest of the CMA did not pay nearly so well. Work in the western activity spine was reported as best paid at roughly R 2000 per month, followed by the CBD and Tygerberg North at R 1800. Other areas ranged downwards, with jobs in the central townships recording an average wage of about R 1400. The worst pay levels mentioned by township residents were in the northern activity spine, at about R 1100 per month.

Informal areas employees faced lower wages, but also found remarkably little variation in pay levels by city zone. No city zone paid particularly well, and wage levels reported clustered around the average wage of very roughly R 1050. Highest wages recorded came from a few cases in Blue Downs periphery and the northern activity spine, at R 1300 and R 1200. Most zones reported averages between R 900 and R 1100, going down to R 600 in Helderberg and the East Flats Coloured areas where domestic work was often at issue.

In this light it appears that for townships residents who cannot get local civil service work, there is something to be gained by commuting out of the area to the CBD. Jobs found in the zones adjacent to the townships tended to pay lower wages by comparison, and key employment centres in the southern activity spine were not well paid. Work in the CBD was reported to pay 30 to 50 percent more on average than work in the more accessible central townships or southern spine. In this context, the relatively few jobs that formal townships residents did hold in the periphery came up as significantly better paid on average than those in the central zones, at very roughly R 1600 against R 1500 for the central city.

For the informal settlements, the situation for work and wages looks completely different. There was little to choose between city zones, supporting the option of informal areas employees for local work over travel to the city core. Work in the CBD or western spine was reported to pay on average no more than work in the central townships or in Bellville node. For the informal areas residents, the difference between a rough average of R 1050 for jobs in the central areas and R 930 for jobs in the periphery is likely to be too small to cover the cost of travel.

For the type of unskilled jobs sustaining the low average pay levels available to informal areas residents, there appears to be no clear reason for travelling more than is necessary to reach a local job. Living close to work appears as a requirement for retaining as much as possible of a low base salary, encouraging informal residents to move out of the core settlements allocated to black people and find jobs and accommodation near them through any process necessary.

Use of transport to get to work for black formal townships employees was less expensive than for Coloured or white workers (Tables 5.16 - 18). Close on 40 percent of township employees reported that they paid nothing to get to work,

and therefore were not using the public transport system or taxi transport. The average earning level of these workers was about R 2100, higher than that of workers who were paying: this apparent anomaly is explained by the highly paid civil service jobs in the East Flats Khayelitsha sample, which were located within walking distance of home for most of the holders.

Most of the black township workers who did use paid transport reported that they paid less than R 10 for the trip, with 25 percent paying less than R 4.00 and 29 percent paying from R 4.00 to R 10.00. At these prices monthly costs could average about R 50 in the lower bracket and R 150 in the higher bracket, on the same assumptions used above. Average income levels for these transport users were recorded as about R 1700 in each case, so that at these levels transport costs could represent about three to nine percent of these employees reported salaries. At the top end estimate, these township households would be paying a significant part of their nominal income on travelling to work.

Relatively few township workers reported themselves in the top bracket for travel costs, at more than R 10.00 per month. Only eight percent of households fell into this category, and the average wage was higher at roughly R 1900, above the average level of pay for the CBD. If their travel costs approximate the stipulated point estimate of R 220, their expenditure on transport to work would be relatively very high, representing as much as 12 percent or more of their nominal income. At such prices, the returns gained by travelling further could become problematic. If the trip were not daily, costs would fall and workers would still gain from commuting further.

For people in the informal areas, a similar but more skewed distribution appears (Table 5.16 - 18). At 47 percent, nearly half the employees reporting said they did not pay to get to work, a figure that approximates fairly closely to the 53 percent of informal areas workers who said they worked in their own residential zone. These workers were earning R 900 per month on average, helping to confirm that the most local jobs held by informal areas workers probably tend to pay less than the average for all informal settlements employees.

Another 14 percent said they spent an amount less than R 4.00, and a larger number at 28 percent reported paying R 4.00 to R 10.00 on travel to work. Average incomes in both cases were similar again at about R 1100, and for incomes at this level the reported travel costs would be a serious burden. Point estimates for this income level would be about five to 14 percent of recorded income spent on travel. If it is necessary for informal areas workers to spend as much as R 150 per month on travel in order to earn an additional R 200, the total return on the effort and time invested would be doubtful. However, for the

lower estimate of R 4.00 or below, travelling to reach better paid jobs in other zones of the CMA would be a worthwhile investment.

At the same time, the striking flatness of the salary distribution suggests that the more informal workers have to pay to reach work the less the return will be: also, that with high transport costs against consistently low wages the returns can easily become negative. That is, for the people in the informal areas, the gain in wages from travelling is exhausted quickly as the R 1100 ceiling is reached, and no work zone that is further from home than an R 5.00-R 8.00 transport fare is probably worth travelling to. In this sense, informal areas residents are likely to be prisoners of location factors to a significantly greater extent than Coloured or white workers, and even to a much greater extent than black townships workers. In turn, the need to find work fairly close to home may exert pressure on informal residents to disperse their settlements further in order to avoid exhausting the job market in any given locality.

At the top end, 18 percent of the informal areas workers said they paid more than R 10.00 to get to work. Average wages for this group were the lowest of all, at under R 900 per month. If these workers pay this rate for daily commutation, they would be losing up to a quarter of their wages on travel, a level which would only be sustainable under conditions of serious stringency and lack of alternatives. However, many of these workers appear to be domestic employees working in the southern peninsula and other outlying areas, who commute on a weekly or monthly basis to homes in the central townships informal areas or other settlements which are crowded close together and where work is locally scarce.

Overall, it appears that costs of travel for informal workers who are not able to walk to work or otherwise avoid paying transport costs can be significant, though they are partly relieved in the cases where the trip to work is not made daily. The room for maneuver which low-paid informal workers can find seems to be very limited to the extent that wages are constant across city zones, but work is a desperate need and the worker can control his costs only by locating closer to work sites. If these factors operate straightforwardly, they may exert significant effects on migration and on the distribution of informal settlement in relation to formal settlement across the CMA. The dynamics of the relationship between work location, informal settlement and levels of pay appears to be an area which will repay further analysis.

6 Finding areas - how migrants settle

Entry systems - prevailing practice for how people moving on within the CMA find new areas and arrange to move into them - indicate the nature of institutional structures within named localities. In this light they have wide implications for settlement and delivery processes. Results suggest that entry systems scale in relation to poverty, with impoverished areas operating social entry systems, and upper-income areas using market-related processes that are relatively impersonal.

6.1 *Identifying an area*

Table 6.1 and 6.2 show how on-migrating families and individuals in different types of settlement and who came from outside the city identified their destination areas. For white families, information channels seem to operate relatively effectively, providing household decision makers with what they needed to know in order to decide where they wanted to go. Only four percent said they used the public media to identify a destination area in the first place: instead, whites relied on general knowledge, own experience and other general sources of information to make the choice of area.

Forty-one percent of the whites responding said they chose areas they already knew about, and 12 percent said they had lived in the area before. For another 14 percent of whites, information about suitable destination areas was provided by employers, often in cases where the work relation was the main reason for the move. Less than a quarter used network connections through friends or relatives.

For the other communities, decisions were made with different information sources. Information flow is dominated by personal network connections, and outside the hostels few black respondents reported using any other source. In the black townships, for people who had come from outside the CMA 82 percent of respondents said they had used their network connections through friends or relatives to locate a suitable opportunity, against 88 percent in the informal areas. Less than ten percent in either case said they knew about the area beforehand, and less than five percent had information from employers. By contrast, in the hostels nearly two thirds of respondents said this option had been suggested by employers, and only 28 percent had used personal networks.

The people of the Coloured townships stood in between white and black practice, but made more use of public media than either. Only 28 percent of respondents reported using personal network connections to identify an area, while 17 percent said they knew about the area already from their general

knowledge. However, exactly a quarter of the Coloured township respondents who reported said they had used the public media, mainly in the form of newspapers, to identify a suitable area. This option was not reported by any of the black respondents, and was mentioned by only four percent of the whites. Employers were only slightly more significant for Coloured families than for black families.

In this sense it appears that it was only the white families who were originally outsiders who were often able to acquire the general knowledge and experience of the CMA's urban environment to be able to navigate on their own for the most part. Instead, the black communities relied overwhelmingly on the household's contacts to find areas to live in, suggesting perhaps less overall access to knowledge about the city. Coloured households coming in from outside used personal contacts much less, seemed to have more general knowledge, and reported using the public media to fill in gaps.

The relation between income levels and how households locate new areas is presented in Table 6.3. It looks as if higher income families show a strong trend to use general knowledge, while lower income households were able to rely on general knowledge in less than ten percent of cases. Conversely, reliance on contacts through network connections accounts for two thirds of the low income households' choices, and for nearly as many in the middle income category. But this route was only about half as common for high income families across the race groups, at just over a third. Information from employers did not vary significantly by income category, but only the more mobile well-off households were able to cite having lived in an area before to account for as many as ten percent of choices. Reliance on contacts to locate an area to settle in therefore appears to scale with income, and poorer households use this route mainly.

One consequence of these differing ways of moving may be different levels of social capital accumulating in the communities that result. As noted in section 7 below, white communities appear relatively atomistic, with little internal coherence to hold members back from moving on. In contrast, the black settlements and particularly the Coloured settlements appeared much more committed to their localities through their local connections. This relatively high coherence would be a logical outcome of black households moving toward their contacts, but this practice is not reported as dominant enough in the Coloured areas to explain what seems to be very strong cohesion. Actual entry practices may help to fill in this query.

6.2 *Gaining entry to a new area*

Having identified the area they want to move into, nearly three quarters of white households reported that they used the print media to find a house and open the way for them to make arrangements to move in by dealing directly and only with the owner (Table 6.4). This system is impersonal. On the qualitative interviews white respondents had difficulty in envisioning a settlement system in which they needed to see anyone else or get permission to move in from any local body: only some housing estates where families moving in went through the developers had anything resembling a community-based settlement system which could accept or refuse new people. In this light, entry systems for white areas appear to be mainly decentralized and market-driven, with households moving by individual decision into the most suitable area they can afford.

For the disadvantaged communities, the situation was not the same. The single most common form of entry process for finding accommodation in the Coloured and black areas was through a personal sponsor to either local government or a local committee body, which would take account of the sponsor's recommendation, interview the prospective migrants to scan or vet them as candidates for entry and then often pass them on to a specific site or area. In some cases gangs appear to fill this role in the Coloured settlements, though little was directly reported on this sensitive issue. Otherwise, formal local government played a role in many Coloured areas, often through rental arrangements.

In the black settlements, entry often went through local bodies such as area or street committees, which frequently had political affiliations, and were generally seen as acting on behalf of the community to ensure that new entrants were respectable people. However, these bodies often collected fees as well, and were sometimes under the control of individuals who were not democratically accountable in the usual sense of local government. Social entry systems of this kind, originally in place to ensure a safe and mutually reliable community in rural areas, are open to abuse and can become the occasion for personal gain or for quasi-political personal fiefdoms in urban contexts especially.

Social entry systems of this type are found throughout the world in poor urban neighbourhoods, which use them to try to defend against criminals and destabilizing elements, to liaise with the outside and to resolve local problems. They tend to generate communities with a strong sense of identity, which may be accompanied by suspicion of outsiders or the potential for localized rivalries over resources. The continued right to live in the community is not only a function of owning the dwelling unit, but often depends on maintaining a sound community position in the eyes of neighbours and the local body or local leader.

This kind of entry practice, through a sponsoring connection to a local body, was reported for about a third of the black and Coloured township groupings, but by 60 percent of the informal settlement residents (Table 6.4). Other related entry systems also appeared in the data. In the black townships, an alternate public entry process occurred where the head went individually without a sponsor to some local body at 18 percent, making up to a total of half the recorded townships transactions involving permission to settle from some de facto public body. With more of a rental market than the informal areas, the black townships also recorded landlord systems at 28 percent. The head of household approached the landlord or owner with the help of a sponsor in half the cases, and went directly to a landlord in the other half. In these cases, landlords are able to convey local acceptance in something the same way as local leaders.

In the informal areas, the major alternative to entering through a public body with the help of a sponsor was to approach the local body directly, less common at 19 percent. Another 15 percent of respondents said they did not need to go through any local body, but worked their way into the established community by staying temporarily with friends or relatives living in the area. Some informal areas are reported in the qualitative data to allow new entrants to simply build a dwelling on the edge of an inhabited area, without any formal or informal entry procedures.

Entry processes for the Coloured formal townships look more widely spread (Table 6.4) though response levels on this item were not high. While 38 percent went with or without a sponsor to local government or to some local body or leader, another 19 percent reported staying with relatives or friends for a period. Seventeen percent approached a landlord or owner, more commonly with a sponsor but in three percent of cases without. Eleven percent said their employer had organized accommodation, and only 14 percent said they had used the media, answered an ad or used an estate agent. Replies seem to reflect a process which is more often social than impersonal, and which links to high levels of social capital in destination areas. In addition, it appears that a number of Coloured respondents have been locating rental accommodation via social rather than impersonal or market processes.

However, reporting on this item is not very complete, and qualitative results also suggest that the commonest entry processes for Coloured respondents are partial market processes, less circumscribed by social rules than those found in poorer black communities. That is, though the communities that result are often very tightly knit, what is involved in entry is access to accommodation in the first instance rather than obtaining membership of a bounded grouping. Community

identity grows over time, perhaps starting from the sponsorship connections that are reported involved in entry in two thirds of cases.

Table 6.5 shows how entry and accommodation processes relate to race. Forty percent of the Coloured families said they went to some local government body, with many renting directly from local government. Thirteen percent approached private landlords, 19 percent stayed temporarily with contacts, and 15 percent used the media. For the whites, only the media routes were important at 74 percent, though eight percent reported using sponsors to help them approach landlords or local bodies, and seven percent stayed with contacts on first arriving.

For the black respondents, 43 percent went to local bodies or leaders through sponsors, and 15 percent went to local bodies directly. Nineteen percent were in accommodation organized by employers, often in hostels, and ten percent approached landlords. Use of media options was insignificant at one percent. For the black grouping as a whole, entry routes and access to accommodation involved either local bodies or local leaders other than landlords in 58 percent of cases.

Finally, involvement in social entry routes also scales in relation to income (Table 6.6). Going through a sponsor to local government or local leaders reaches nearly half for the low income grouping, against 41 percent of the middle income category but only ten percent of the high income category. Many but not all of the bodies involved are informal, and have no official standing. But approaching local government or local leaderships independently is more than twice as common for the low income households as for the middle or high income households, at 16 percent as against seven and five percent respectively. The trend for using the media to find accommodation runs the other way, from 2 percent for the low income grouping to 47 percent in the upper income group.

All other alternatives are more or less neutral in relation to wealth or poverty, and also much less important. Much of the divide between rich and poor in the settlement process appears in this relationship around how to find living space.

It appears that in the CMA as in many cities which accommodate a large and relatively marginal poverty sector, the kinds of community that emerge on the ground owe much of their character to the way people locate areas and find accommodation. For the well off, entry is impersonal, and communities are relatively atomized, though many do attain some local sense of identity. For the poor, relatively cohesive local communities result from relatively high dependence on local contacts and sponsors in bringing new families in, and these communities often continue to exercise some supervision or control over

members' continued tenure in their areas. In many others in the turbulent urban context, strong social cohesion does not build into local identity, or does not result in institutional coherence. More than half the Coloured respondents and more than two thirds of the black respondents seemed to see their communities as institutionally weak and ineffective (see above, Table 7.4). For the informal areas particularly, qualitative results suggest a continuing tension between grass roots attempts to stabilize communities at an institutional level, and the tendency to fly apart that results from high residential turnover in a poverty context.

7 Moving on: future population instability

Prospects for continued on-migration contributing to population instability are difficult to determine in advance, since household decisions depend on individual considerations as well as on policy and delivery in relation to the informal areas and black townships particularly. Results suggest that continued migration from the Eastern Cape and the Cape hinterlands more broadly is all but certain, though levels may fluctuate. Chances for sudden decompression or more gradual outflow of the informal population in the mainly black settlements therefore respond to a number of factors, including outside migration and future levels of housing and infrastructure delivery inside CMA. Though no precise prediction is possible in view of these uncontrolled factors, the future migration intentions of the respondents are likely to be an important contributor.

7.1 Perceptions of stability

The Coloured township population appears in the results as most rooted in terms of its expressed views in the survey sample (Table 7.1). Over three quarters of the Coloured and Indian respondents said they thought their household was finished moving, leaving less than a quarter thinking they were likely to move on. At 3 percent, very few were uncertain of what they would do. Intentions in this grouping appear to be relatively firm: a second question, on whether there was any local situation that might lead the household to move on, produced a stronger negative response at 84 percent (Table 7.2). Only 8 percent of the Coloured and Indian respondents said they were currently considering a move, and 8 percent were unsure in relation to this survey question. Future on-migration in the Coloured community appears unlikely to rise above 20 to 25 percent if no serious local or outside considerations intervene.

The white grouping was much less sure overall of being finished with on-migration. Just over half said they thought their household would not move on, with 37 percent saying another move was likely and ten percent uncertain (Table

7.1). On-migration potential appears strong in this context. However, like the Coloured respondents, white respondents' certainty regarding not moving hardened in relation to their specific local situation, rising to 59 percent on the question about local situations which might lead to on-migration (Table 7.2). On the other side, 20 percent of the white sample said they were actively considering another move at the time of survey, and 21 percent thought another move was a possibility. A level of white on-migration based on expressed intentions at the time of survey might therefore lie between 20 and 40 percent for young and middle-aged families.

The black settlement areas reacted differently. With 50 percent saying they did not expect to move again, the black townships were less overtly committed to future stability than either the Coloured grouping or the whites, by a small margin. Nearly 40 percent of the township residents said they did not think they were finished moving, and 11 percent were not sure (Table 7.1). In addition, the share who were confident they would not move on fell when respondents were asked to consider their current situation, to 44 percent. Eighteen percent of the black township respondents said they were actively considering a move at the time of survey (Table 7.2).

In view of poverty and insecure rental accommodation in the townships, high competition for sites and housing and poor levels of delivery of public services, a ballpark figure for total mobility potential in the township samples might lie between 20 and 50 percent on-migration for younger families. Much of this on-migration will flow into current informal areas, as well as into those yet to be established, and much will squeeze into insecure informal rentals.

The informal settlements were clearly the most marginal population, and consequently the most mobile and unstable. Those who thought they would move outnumbered those who believed they would remain where they were. Only 36 percent of the informal areas respondents thought they were finished moving (Table 7.1), and over half thought they probably would move again. Another 14 percent were not sure of their future situation for on-migration. As in the townships, the share of respondents who thought they would remain settled fell when they were asked to consider their local situation, to just over a third. Nearly a quarter of the informal settlements grouping said they were actively considering a move, and the category who were unsure reached 42 percent (Table 7.2).

With such high levels of uncertainty, actual on-migration potential is difficult to estimate. It seems clear that most informal settlements residents would like to move on if they were able to find a better locality. The chances that the majority who say they expect to move will actually be able to arrange for a preferable site

may not be high, as the large number of informal settlements migration paths that pause or end after the second move testifies. On past history, it would appear that at least 20 percent and perhaps up to half or more of the informal areas population is potentially unstable. Relatively small household size in this sector may suggest that informal areas residents are not willing to tolerate much compression, fuelling the land invasions, gradual occupations and other moves that are taking place on a continual basis. At the same time, Abbott and Douglas (1998) have noted that not much more suitable land with acceptable transport connections is now available for informal occupation inside the Metro boundaries.

7.2 *Reasons to stay*

Perceptions of the local situation underpinning stability are summarised in Table 7.3, in relation to reasons put forward for not moving on. For all settlement groupings except the small hostels sample, the investment in local knowledge and accumulation of social capital - what is built up over time under the heading 'used to this place now' - figured as the main reason for not moving again, placing ahead of housing and infrastructure. At the same time, the cost of moving came up persistently as a barrier to on-migration in the poorer black communities. Only a minority of whites and Coloured respondents showed any signs of considering themselves physically safer in their present localities than at wherever they might move to.

In the Coloured townships, 55 percent of respondents referred to social capital and local knowledge, trailed by personal safety at 11 percent and satisfactory housing at 7 percent. Infrastructure, amenities, the social climate, the cost of moving and the difficulty of finding a better place were relatively negligible factors.

For the white areas, local social capital factors were cited by 33 percent of respondents, the lowest figure recorded. Another 16 percent mentioned infrastructure, and 14 percent each referred to safety and to housing quality. Nine percent said moving again was too expensive.

The black townships put the highest value on social capital and knowledge factors, with 62 percent citing becoming used to the place as the main reason for not moving again. The cost of moving came second at 16 percent, followed by housing at 12 percent. Other factors appeared much less significant to the way respondents saw their situation.

In the informal settlements as the lowest economic sector, local connections and social capital accounted for 55 percent of mentions, an intermediate figure. The cost of moving rose to 21 percent, suggesting that for the poverty sector immediate cost concerns can be a major determinant in deciding whether or not on-migration takes place. Results here may suggest that an improvement in CMA employment levels or greater access to better quality jobs for the poverty sector could become a contributing factor to a rise in informal settlements on-migration. What happens in this regard will depend not only on the business cycle but also on levels of outside migration from the Cape hinterland, which tends to act to anchor wage and employment levels for the poverty sector of the CMA population.

In spite of the importance placed on housing and infrastructure in the township populations, relatively small numbers of respondents mentioned their current housing as a barrier to moving on. Only the white respondents and a relatively small share of the black township grouping cited themselves as committed to their present housing. Housing was not given as a major factor in the crowded Coloured communities where more families rent than own, and was insignificant to the informal settlements respondents, who lived mainly in informal structures. Infrastructure as a reason to remain was a significant factor mainly to whites: for the less well provided communities, their current access to infrastructure did not come up as an inducement to stay.

7.3 *Reasons to move*

A different picture of potential on-migration comes up in relation to the range of factors which might persuade the household to move again (Table 7.4). Results suggest that the informal areas residents may be extremely willing to move, and would move for wide range of improvements in their quality of life if these were to become available. By comparison, even the hostels residents, with no permanent prospects in their current accommodation, presented themselves as less open to moving on than the informal areas grouping. The white population appears as relatively satisfied, and fairly unwilling to move for any of the opportunities being asked about, while the Coloured respondents came up in the data as potentially more mobile than the whites but not strongly interested in moving other than for better housing or a bigger plot. The black townships were in an intermediate position, with a fairly strong interest in most of the improvements on offer, but well behind the informal residents.

Housing and family space came up as the only really compelling inducements to move again in the eyes of crowded and poorly housed Coloured families, at 82 percent willing in principle to move for a better house and 75 percent prepared to move for a bigger plot. Personal safety ranked next at 66 percent willing to

move, followed by a better organized community. Better work drew only a 50 percent response, just behind better infrastructural services. Other factors, including schools, business opportunities, transport and land trailed with less than 50 percent each. It would appear that housing in the end may be more important to Coloured families than economic opportunities or physical infrastructure, and that safety and sound local governance are also important unfilled needs.

For the white respondents, only housing quality and personal safety came up as inducements to move, and at 56 and 44 percent respectively these factors were still relatively weak. Scores for infrastructure, work, business opportunities and transport ranged down through the 40-25 percent response level. Well provided and relatively disinterested in most options related to public provision, the white constituency comes up as the most rooted in their present localities in spite of their openness in principle to moving on to new areas. On-migration in the white areas is likely to be triggered mainly by individual circumstances rather by shortfalls in public provision or economic opportunities.

As in the Coloured townships, black township residents responded most strongly to the option of better housing, at 96 percent, or a bigger plot at 87 percent. Services and infrastructure followed at 75 percent, just ahead of personal safety at 73 percent. Below that level, transport access, a better organized community, access to water and business opportunities all scored in the 60s, ahead of better work. Only land and natural resources drew relatively low response levels around 40 percent.

The township residents appear more interested in moving for public provision than the white or Coloured respondents, but as in the other groupings their main priorities seem to be housing and space, followed by safety, infrastructure and institutions. Economic opportunities scored relatively low. It appears that the CMA may still providing comparatively adequate employment to its poorer communities - if at relatively low wage levels - so that earning opportunities were a weaker priority than might be anticipated.

Potential migration appears as strongly consolidated in the informal areas, where public provision is extremely weak and the great majority of families are badly off in relation to housing and infrastructure. More than 90 percent of the informal areas respondents said they would move again to get access to a better house and bigger plot, or to better services and infrastructure, specifically including access to water. Better work, personal safety and a better organized community scored in the 80s, followed by transport access, business opportunities and better schools in the 70s. In an impoverished community which builds its own housing and often uses environmental materials for basic

needs, free natural resources came up as a reason to move on at 69 percent, followed by land to farm for income at 54 percent and land to farm for food only at 49 percent. No other improvement asked about drew a response of less than 50 percent as a reason to move again.

Results suggest that people in the informal settlements are keenly interested in using migration as a strategy to improve their quality of life and have focussed on physical provision, but know of few if any accessible CMA destinations that would provide the improvements they need. Should such destinations become known, response is likely to be rapid. In this light, using public delivery to upgrade specific individual areas is likely to draw large numbers of hopeful occupants in a relatively disorderly process. It may be desirable to explore other approaches to public delivery for the CMA's migrant poor in order to avoid creating population instability.

8 CONCLUSIONS: ADDRESSING MIGRATION IN THE C M A

The immediate questions around migration which face the Cape Town Metro area are policy-related. They revolve around housing delivery for a migrant population in a planning context of densification and a fixed urban edge. Below the level of planning principles are likely to be fears that the city structure may collapse if the urban edge is allowed to expand outward indefinitely, that the cost demands of housing for the migrant population may be unsustainable, or that the ground-level institutional relations needed to give stability to the CMA's future developmental plans cannot be reliably guaranteed. These objectives may imply some contradictory relationships, which need to be unpacked and debated before implementation planning is fully wrapped up. Concerns of this kind involve migration, and the findings of the present research offer some contribution to the debate.

CMA city delivery planning to date has been based on two implicit assumptions: first, that the city can house its poor in such a way that they can accumulate assets and escape from poverty; and second, that the time will come when all the poor have been adequately housed. Results suggest that the first is highly conditional, and the second may never take place.

The crisis of migration needs to be managed innovatively, and probably cannot be disposed of permanently in any foreseeable future. Rates of migration into the CMA from outside the metro region are likely to fluctuate, and may not

climb back to the peaks of the late 1980s and early 90s immediately. However, the underlying rate of flow appears guaranteed to remain fairly high on average in response to the rural crisis of unemployment and a collapsing land economy for the poor in the key sending areas (Cross et al 1998). With Eastern Cape as the main source area, there are few signs that the economic outlook is set to improve enough to cut back unemployment significantly for many years. In this light, migration rates in the majority black population from the main source areas look likely to continue at 3-6 percent per year in spite of short-term rises and falls. Developments in the other urban places of the Western Cape, their infrastructural components in particular, will influence these rates.

The CMA's established policy of meeting in-migrants with comprehensive full-service housing in planned settlements has worked fairly well as the Coloured migration stream has slowed, and has also dealt fairly effectively with poverty and homelessness among lower-income whites. However, it seems there has been little planning allowance or housing allocation for natural increase in the urban Coloured population. Coloured household sizes at 5.1 on average were the largest found in the CMA, suggesting some blocked on-migration potential.

For the black population, the rate of flow reaching Cape Town over the past 15 years has far exceeded the delivery capacity of the municipal system. The expansion and mobilization of informal settlement and housing systems have been an effective reaction from the standpoint of the migrants themselves, but face the city with perhaps its most grave challenge. It is not clear how far urban government in the CMA can provide housing and services against high levels of migration by the black rural poor, while sustained urban growth will be necessary to hold migration in a viable relation to employment. Sustained growth in turn depends on civil peace and order to maintain a competitive investment climate.

Against this background, the migration results suggest that it may be time to reassess the models of land and housing delivery to which the CMA authorities have been committed, which appear to be unsuccessful in the face of rapid migration flows. It may not be possible to package employment together with housing and full services through official delivery for a rapidly swelling migrant population. It may also be important for successful spatial and development planning to reconcile the goals of the MSDF with the ways in which migration takes place on the ground.

Summary

Several issues come out of results of the present study which relate to these concerns. These include

- Demographic potential of the different migrant groupings in the CMA
- How the dynamics of settlement by the different race groups interact
- Central versus peripheral on-migration and settlement potential
- Dynamics of informal settlement for the disadvantaged groupings
- Attractor and anchor factors affecting on-migration for the different race groups
- Characteristics of the housing market and access to formal housing
- Relation between work location and settlement in the different race groups
- Social entry systems and community recruitment
- Relative employment and economic capacity for the different migration streams.

Results from the present study suggest that formal and informal settlement may be closely connected, and interact in ways that modifies the spatial structure of the city. Although settlement by the disadvantaged groupings remained concentrated inside the city and the Coloured population appears relatively stable at the moment, on-migration potential appears to be building up in both the black and Coloured communities, and black occupation in particular is showing some trend toward the periphery.

The dynamics of migration into the CMA

In-migration into the CMA appears from the random sample to be having a major effect on the character and distribution of population in the city. Migration flows bring in important assets and human capacity, but are building up rapid change.

RATE OF INFLOW At present, rural people moving into the CMA seem to be able to find work in most cases and are clearly better off than they would be on average in their rural communities of origin. However, visible improvements in public delivery would increase the CMA's relative attraction considerably, and news travels quickly. In view of the possible consequences of either faster rural to urban migration or higher intra-urban on-migration, it appears that the CMA is delicately poised in relation to migration flows. If rural conditions remain bad, it is not likely that the CMA will be given a breathing space to sort out its crisis of delivery.

Economic conditions affecting job shedding in the rural sector will mediate the rate at which rural people need to look to the urban sector for work

Delivery conditions for housing, services and infrastructure in the CMA destination areas will also affect the relative attraction of trying the CMA in comparison to remaining in the rural sector.

BLACK MIGRATION Flows from the Eastern Cape and Cape interior appear to be very large relative to the total population already in place. Most of this stream finds its way into the informal areas, though some families have been able to locate in the higher quality built environment of the townships. Black migration continues to come predominantly from the former Transkei, from areas with least access to local employment. The land-based household economy has declined seriously in these source areas, helping to ensure a continuing flow of work seekers to the CMA. For black migrants, routes and reception areas are well known to people in the source areas. Flows enter the CMA and find initial accommodation easily, either on a temporary basis with contacts or in potentially permanent housing in the informal areas.

COLOURED MIGRATION The Coloured migration stream from the impoverished interior is on a smaller scale, but comes into a more rigid settlement process, and Coloured families arriving are often unable to squeeze into the existing townships. There are signs in the qualitative data that displaced Coloured farmworkers coming into the CMA from the interior probably make up much of the population of the relatively small Coloured informal areas, and are likely to be experiencing the greatest difficulty in getting into formal housing. If job shedding in the Western Cape farm sector rises and produces a similar rise in Coloured rural unemployment, the rate of Coloured migration to the CMA can be expected to ratchet upwards as a gap opens between rural and urban unemployment.

Black rural to urban migration can be expected to fluctuate in response to conditions in both the source areas and destination areas as well as in relation to national and global factors, but is unlikely to fall significantly in the medium term.

Coloured rural to urban migration can be expected to rise if either rural unemployment increases in the Western Cape or if CMA public delivery of housing and services improves visibly for the Coloured population.

WHITE MIGRATION The white migrant grouping appears in the results of the study as largely elite and very mobile, practicing neo-local residence with little concern for social capital or network relations as compared to other groupings. Results indicate this grouping is mainly of rural origin, and its expressed preferences for moving to larger plots points to preference for low density housing.

The mobile white constituency has been flooding into the city at a faster relative rate than any other grouping in the past five years, and this stream appears set to continue at a rapid rate of flow so long as attractive housing remains available and a reasonably safe civil order continues in the CMA.

MIGRATION DEMOGRAPHY FOR THE COLOURED STREAM The overall contribution to the reproductive potential of the CMA population from Coloured and white migration appears relatively small. The total Coloured migration stream representing heads of household born outside the city accounted only about 20 percent of the respondent population, and rates of inflow have been falling. Coloured migrant families tend to be older than black migrant households, and have had moderate reproductive potential, for a small overall impact on the CMA's human resources.

Most of the growth in the CMA Coloured population over the past 15 years has been due to natural increase among families already living in Cape Town.

The capacity of the Coloured migration stream to make an economic contribution to the CMA is intermediate between the white and black migration streams, and is significant for a grouping that draws heavily from former farmworkers.

MIGRATION DEMOGRAPHY FOR THE WHITE STREAM The white migrant group has relatively less demographic potential since most households arrive after their reproductive years, with household heads either well on in their working careers or retired. As is the case for the Coloured grouping, the current white population of Cape Town is mainly born in the city of local parents. In spite of rising outside migration, the white migrant group is not self-replacing, and this trend will continue so long as the white migrant stream remains relatively old compared to the other major race groupings in the CMA.

Migrating whites have a smaller impact on the CMA's demography than other groupings, though these households bring in very substantial resources in skills, contacts and assets.

The white migration stream has a significant impact on overall economic capacity in the CMA since education levels among white migrants tend to be very high, and incomes are concentrated in the upper brackets.

MIGRATION DEMOGRAPHY FOR THE BLACK STREAM While it appears that demographic increase in the white and Coloured CMA populations are likely to be mainly from natural increase rather than from migration, the black population has a different demographic footprint. Black migrant households in the sample were significantly younger than Coloured or white households, and tended to arrive during their prime working and reproductive years, raising their potential contribution to the city. Though black respondent households in the CMA were relatively small, the percentage of children was high. However, the total share of the CMA population accounted for by black migration is mediated by the rate at which households return to rural source communities on retirement of the head.

The demographic potential of the migrant black population is significant for the CMA's future, and comparatively disadvantaged migrant households currently outnumber the advantaged locally-born population of the townships.

RETURN MIGRATION Few white respondents expected to return to their original home communities, though some Coloured families expressed this intention. For the black grouping, intention to return was high but uncertain. Interpretation of expressed intentions of returning to rural areas are problematic well in advance of the fact - although very roughly half the adult respondents said they intended to return to their rural communities of origin on retirement, this figure is probably best seen as a ceiling level. At the same time, it is unlikely that any large percentage of the children born or raised in the CMA in black families will return to rural source areas if they are old enough to make their own way at the time of their parents' departure.

Only a minority of the CMA's black population of migrant origin - perhaps a quarter or a third - may actually leave the city at retirement to return to a rural home.

The population that remains will be young, with a high potential for demographic increase balanced by a relatively low short-term demand for official old age services.

EMPLOYMENT CAPACITY FOR MIGRATION At the same time, the migrant black population is the most severely disadvantaged, and these households seemed to have less overall capacity to meet the urban environment than those in

the white and Coloured migration streams. Coming from areas where public education is not well provided, it appears difficult for black rural-born work seekers to penetrate the job market and obtain jobs above the level of routine manual work, while moving into a highly competitive situation for a limited pool of low-quality jobs. There were large numbers of female-headed households in all the migration streams, but those in the black population were most likely to move on their own, to have no male support and to suffer from the accumulated poverty disadvantages associated with women. Average incomes in the overall black migrant population were very much lower than those for migrant Coloured households and far below those of the elite migrant whites. However, higher employment capacity and greater earning were reported among black migrants coming from the Eastern Cape cities rather than the former homelands.

Capacity disadvantages among black migrant families coming from rural former homelands areas marked by poverty and poor public services were evident in education levels, with roughly half not having been given functional literacy.

Education and income differentials between Eastern Cape-born black migrants and locally-born township residents indicate how quickly effective public education services can raise the capacity of children from this disadvantaged migration stream.

The dynamics of on-migration inside the CMA

Informal settlement is the main housing option for the black migrant population, but is only now taking hold again in the Coloured population. As it does, flows to the eastern periphery of the city appear to be gaining force. However, movement patterns and the future outlook for expansion of informal settlement by black and Coloured households beyond the areas assigned to them under Group Areas legislation may depend to a considerable extent on how far the advantaged migrant white population is able to negotiate its own further spatial expansion.

EXPANSION OF INFORMAL SETTLEMENT Results indicate that informal settlement is drawn after commercial and residential development, and occurs easily in less regulated urban spaces. It is likely to follow rapidly if the urban edge moves outward. At present, informal settlement seems to be growing quickly at the planned urban edge, particularly in Helderberg where comprehensive urban development is taking place, with potential in Blue Downs/ Kuilsrivier as well. In the traditional city core around the CBD, undefended open space is very limited by comparison, but informal areas have

begun to appear in and near old established settlements in the central industrial and residential zone.

Accelerated informal expansion into the eastern and southeastern periphery looks more likely in the near future than informal areas appearing in the CBD.

Informal areas are likely to be found increasingly among old established low- to mid-income residential areas previously exclusive to designated groups.

ON-MIGRATION FLOWS IN THE CORE TOWNSHIP ZONE As yet the volume of these on-migration flows outward to the periphery are still subsidiary to on-migration moving within and between the demographically turbulent central townships and informal settlements. These townships and informal areas in the east-central City of Cape Town municipality make up the core areas of black settlement under the former Group Areas Act, and still contain the bulk of the formal housing stock available to black people in Cape Town. Heavy on-migration flows in this relatively small urban zone are involved with jockeying for access to limited existing housing resources, delivered public services, transport link points and work opportunities. Informal settlers have crowded into the open spaces in this zone to take advantage of locational and infrastructural advantages available through the townships and combined with relatively undefended municipal land, but many of these central informal areas appear to be reaching their occupational maximum and migration has slowed or stopped. As outside migration continues to arrive in the CMA, larger-scale movement to the periphery may follow.

At present the key to urban on-migration for the majority black informal population lies in the relation between available serviced housing in the townships and informal housing opportunities.

Movement in and among the central townships and informal areas accounted for half of all recorded movement by black people within the CMA.

WHITE MIGRATION, URBAN COMPACTION AND INFORMAL SETTLEMENT As the MSDF implies, it is likely to be the pressure of white migration that exerts force toward the physical expansion of the city beyond the present urban edge, and therefore against the planning objectives tied in with the concept of the compact city. Unlike elite whites, the disadvantaged groupings have neither the leverage on the policy process nor the resources to expand settlement on scale into unserviced areas on the CMA's borders.

Black informal settlement in the CMA has followed white upper-income residential development as well as industrial and commercial development, so that expansion of white suburban developments is likely to draw informal settlement outward

In the absence of elites of colour in the CMA, white settlement in effect pioneers for the expansion of informal settlement, establishing transport and service networks and putting down the groundwork for employment generation.

PLANNING IMPLICATIONS OF WHITE ON-MIGRATION In the light of apparent low-density preferences, the white migration constituency may continue to demand new developments with large residential plots and single-family dwellings on the city edge, in Helderberg and the northeastern suburbs. South Africa has little tradition of high density urbanism as a preferred option for elites, and South African white populations of rural origin carry with them the traditional demand for extensive living space. How far city planning will be able to use the methods outlined in the MSDP to contain this demand is not clear. The implications for higher-bracket prices in the housing market - and from there to continued white high-income migration - are also unclear for any scenario in which development of new housing on the periphery is successfully contained.

For this elite key constituency, flight to the periphery may be a more likely and more serious scenario than the kind of flight to the centre considered in the MSDP.

INFORMAL AREAS AS A HOUSING OPTION Housing choices for black migrant households appear to follow one of two basic options. The townships offer formal housing with some tenure security, formal services covering basic needs, education and health, and transport access to commutation connections to work in more advantaged areas with higher average wages. These formal areas are seriously overcrowded, however, are expensive for the migrant rural poor, and require contacts to arrange access. Commutation to work is also difficult and expensive due to their locational disadvantages. As a housing option, the outer informal areas offer varying levels of services, shelter and tenure security depending on their legal status, but most have no formal services or housing, and only taxi transport which is relatively expensive. However, informal settlements are much cheaper to live in than townships, and informal settlement is mobile enough to exploit location factors. Settlements on the urban periphery are often sited close to local work opportunities of a relatively lower wage level, avoiding the need to commute.

Migrant black households unable to gain or keep a foothold in the CMA's formal townships often step down the ladder to the informal option, taking as much advantage

as possible of low cost of living and location advantage as a trade-off against lack of services and infrastructure.

For black and Coloured township residents, the value of housing, services and invested social capital in the townships appears to outweigh their locational disadvantages.

Informal areas may be the only practical option for migrant families with little earning capacity who are unable to afford township living, service costs and/or formally delivered housing.

URBAN MOBILITY FOR THE RACE GROUPS Results indicate that household mobility differs significantly by race and type of settlement. Results confirm that movement through the CMA housing market is still highly segmented by race. The Coloured, white and black populations appear to move in different areas for the most part, and by different processes. Whites were well provided for, but the black and Coloured populations are effectively unable to move up to a position of advantage in regard to housing and physical provision. For the Coloured grouping, the rental market seems to be absorbing most of the overflow from owned housing stock, partly into backyards. On-migration potential is building, and a Coloured informal fringe is developing though it has not expanded far as yet. For the black population, the informal areas offered abundant overflow space and crowding was less serious overall, but competition for existing formal housing stock was fierce. Hostels residents tended to be rural born and young, and eventually moved into either the townships or informal settlements.

Actual mobility was highest for the white population, for whom the market works effectively and who are able to move up to higher standards of housing as they move on.

The Coloured population appears as the most stable, with deep community roots and strongly declared unwillingness to move. The housing market is largely obstructed for Coloured families, however, and there was little to be gained by moving on.

For the highly mobile black populations in the townships and informal settlements a housing ladder does exist and moving on helps to improve housing standards, but this ladder does not lead to a reasonable standard of accommodation for many.

ATTRACTORS IN ON-MIGRATION In the narrow sense, job search - the classic engine of rural to urban migration - does not appear to be driving on-migration within the CMA. For the disadvantaged population groupings, the search for work as a reason to move dropped rapidly after the first recorded move, though it remained a very significant factor for the families in the informal

areas. For later moves, the important factors came up as first housing and family space, and then infrastructure and other physical delivery factors involved with quality of life. However, housing was more dominant for the Coloured grouping than for black respondents. In this light, CMA on-migration is mainly a function of public and private goods delivery, in terms of the classic models of intra-urban migration. However, though black families seemed to achieve some improvement in their category of housing as they moved on, for Coloured families the reported types of accommodation remain almost flat across migration trajectories, so that for every Coloured household that manages to move up to a better category of housing, there will be another which has seen its housing category decline.

Expressed willingness to move on again to obtain any of a range of physical or economic improvements was very high for black respondents, and much higher than for the other race groups.

Coloured and white respondents were most willing to move on for either better housing or a larger residential plot.

WORK LOCATION IN THE CMA Although large commutation flows are recorded on the CMA's major transport routes, results of the survey suggest that the largest part of all employment in all race groups is local, and does not involve travel outside the immediate city zone. Most of the remainder of employees worked in other zones comparatively close to their area of residence. Only the southern and western activity spines - city zones lying on the main activity corridors - and the main townships seem to send more of their workers to the CBD than they employ locally. For the black informal areas together, and particularly for the peripheral informal settlements, the CBD accounted for one job in ten or less. Overall, using provisional unweighted figures the CBD accounts for about 15 percent of all recorded employment across race groups, but is reported to pay a little better on average than most other zones for black employees. Estimated commutation costs varied from two percent to ten percent of reported household incomes.

Commutation work in the CBD is concentrated in the township populations, but it appears that relatively smaller shares of workers in each race group work in the CBD and need to commute over significant urban distances.

Access to work is perhaps the main determinant of informal settlement, and the peripheral informal areas appear to be developing in response to lower quality but still important employment opportunities located off the main commutation routes.

SOCIAL ENTRY SYSTEMS AND THEIR IMPLICATIONS The implications of social process around settlement and on-migration have not been fully explored for planning and delivery, and are not always well understood by the planners and implementors who have to work with them. Migrating black communities of rural or urban origin use very different methods of finding housing and recruiting communities from what is reported as normal for Coloured and white migrants, and the different systems in use compile different kinds of communities. Coloured respondents reported making extensive use of media to collect information around possible areas for settlement but also tended to move locally whenever possible and to use local government assistance, while white migrant households at the top of the income scale relied on general information in an impersonal process and moved freely over wide distances. At the bottom of the income scale, black communities relied strongly on personal network information, and depended to a great extent on social entry systems through local civil structures or community leaderships to organize and direct settlement and screen new candidates for respectable standing. At the same time the relative stability of the Coloured grouping in the sample seems to reflect in very strong identification with locality and extended family relations, to nearly as great an extent as the black respondents. Results suggest the template for relations to the community is set through the settlement process used by migrating families, and the social action capacity of the community that results is rooted in these relations.

All groups reported investment in social capital when they settled, with over half the white and Coloured families, two thirds of the black township households and nearly three quarters of the black informal residents saying that there were families closely related to the head living in their settlement.

Compared to whites, Coloured respondents placed a high value on local ties and on social capital relations in general, and Coloured families were more likely than any others to say they did not intend to move again, while black families used social capital relations as a means of moving on.

ON-MIGRATION POTENTIAL IN THE CMA The implication is that what appears to be relatively very high on-migration potential exists in the CMA's disadvantaged populations, which is partly released in the black population by the establishment of new informal areas, but which is still largely blocked in the Coloured grouping. The CMA's relatively young black population seems to have the highest on-migration potential, with about two thirds of the sample households still inside the main demographic window for migration and not far down their potential lifetime migration tracks. On-migration potential in relation

to expressed willingness to move on also differed between the black and Coloured groupings. Though the people of the black and Coloured townships report about equal levels of satisfaction with their residential on-migration, the black population by comparison - and in particular black women household heads - came up in the data as much more willing to move on. This potentiality concentrates around housing quality, family space and physical delivery. Since significant on-migration potential clusters around this issue but is currently shut off because little formal housing stock is available to the disadvantaged population, any attempt to release the housing logjam carries downside risks.

Housing appears as the main chokepoint in urban on-migration, and as families move on they appear to be striving for their own houses of an acceptable urban standard.

The possibility exists that attempts to provide new housing on scale would not only be expensive and technically difficult, but might also risk galvanising disruption and instability on a similar scale.

RECOMMENDATIONS

It appears that migration factors need to be taken directly into account in relation to the CMA's spatial and delivery planning. Significant demographic streams are flowing into the city and seem set to continue. Though migration from outside the city is not a major factor for the majority Coloured grouping, most of the rapidly expanding black population has arrived in the Cape Town Metro area during the lifetime of the present household head, and the routes and networks that sustain migration are now well established. White migration is increasing, and is likely to have effects on planning beyond what the numbers and demographic potential of this group would suggest. Working in synergy, elite white and poor black migration may be changing the spatial balance of the city and challenging planning dispensations as formal and informal settlement flow to the periphery.

In this light it appears important for the planning process to consider the impact of migration closely. Specifically, the planning process may need to take account of the intermediate institutional processes around on-migration that create communities on the ground so that they are either stable or unstable, and of the factors which determine how effectively the disadvantaged migrants and their children will be able to engage the economy of the city. If not done very well, planned densification of rapid migration may build up a reaction in terms of decompression potential, that might burst out into the kind of abrupt surge of new informal settlements that have occurred elsewhere in South Africa. Attention may be needed to the process aspects of planning.

The key objective of CMA planning - to provide housing and public services to disadvantaged new arrivals in such a way that they can put together a household asset base and enter the mainstream of urban economic life - remains extremely sound, and will be critical to maintaining civil peace and order that can support a competitive investment climate. At the same time, in view of the scale of the flows involved, there is reason to doubt that even soundly based municipal or public/private delivery plans will cope successfully with the need for housing and public delivery for the arriving black population as well as for natural increase among the overcrowded Coloured grouping. In this light the interface between urban planning and migration needs to be given priority.

- 1 *Spatial implications of compact settlement planning:* It may be worthwhile to work through some of the possible implications of compact settlement planning in the light of migration factors so as to reconcile opposing dynamics. The flow of the migrant poor to the periphery of the city does not dominate urban on-migration flows at present, but appears to be increasing. Peripheral flow is encouraged by congestion in the township core, where households have access to transport but struggle to find and hold on to formal housing and the income levels needed to maintain it. If continuing outward movement of white settlement establishes more work opportunities on the urban periphery, the outward flow of settlement by the migrant poor into interstitial spaces may increase, requiring upgrading and services in scattered localities. However, if elite white settlement is successfully contained, there may be some possibility that flows of high-income migrants will taper off, leaving less earning opportunities for poor migrants who are unable to find living space in the townships. If so, flows to the periphery may rise less, but earning opportunities in contingent jobs such as domestic service may also be flattened, leaving less opportunities for the poor to escape poverty and more for crime. However, delivery closer to the main activity corridors may require forms of compaction that are not easy to sustain.
- 2 *Physical planning implications of compact settlement planning:* Physical delivery models for disadvantaged settlements of migrants in the compact city may also need close consideration. Multi-family dwellings in the denser Coloured townships have been associated with gangs using entryways as pressure points to take control of communities, while areas of single-family free-standing housing have been relatively free of gang activity because the built environment does not support it. The current Coloured migration stream most in need of housing comprises lower-income former farmworker families, and may face pressure to accept

high-density options that carry a similar risk. Denser occupation in any of its forms is likely to encourage social tension and violence in rural-born black migrant groupings, which often see crowding as a very serious source of friction between families that generates quarrels and violence which damage the community and ought to be avoided even at considerable cost. High rise/ low rise multiple family dwellings with shared entrances and unresolved control over public spaces can carry serious risk of undermining cohesion, but even reduction in site/erf size for single dwelling units often leads to forebodings and/or resistance. Putting macro-scale planning concerns ahead of participatory input from the ground is a normal pitfall for planned delivery programmes.

- 3 *Procedures to promote effective interaction with migrant communities:* In dealing with migrant settlements it appears critical to take the same care with developing procedures and incentives that will support transparent, responsible and accountable local structures able to deal effectively with municipal government, as has been given so far to encouraging compact settlement. The CMA has a relatively excellent record here in areas such as community policing, and civil structures in the city's black communities have remarkable capacity in comparison with similar structures in other parts of the country. However, as migration streams into the city, land invasions, violence and crime continue to take place on a large scale, endangering the CMA's competitive position as a world city. Local communities on the ground resist criminals to the best of their ability and sponsor land invasions when they have no orderly alternative. Effective connections, procedures and liaison with urban government can help to promote solid, mutually reliant communities able to resist disorder, advance self-help and lobby for their legitimate demands and claims through public processes. It is not clear that planned delivery programmes such as iSLP which target migrants have engaged the communities or promoted and supported effective democratic leadership and accountability to the extent that they need to.
- 4 *Reconsidering comprehensive housing and services delivery and upgrading:* Cost-effective provision of housing and infrastructure for the migrant population is a key priority, alongside delivery for the overcrowded locally-born Coloured and black populations. The models based on comprehensive top-down delivery of services and housing - or on the similar assumptions underpinning rollover upgrading of existing settlements - have fallen behind the scale of delivery needed: rollover upgrading has also been characterised as a disruptive process and may contribute to urban instability and unplanned on-migration. There is a case to be made for exploring the options for community and household

self-help to a much greater extent than has been done so far. Taking a more flexible approach to use of the housing subsidy by individual households or small self-organized groups would face immediate problems, but it is very unlikely that comprehensive delivery will ever be able to house the scale of migration likely to be entering the CMA annually for the foreseeable future. Minimalist approaches to site and service delivery could offer a route to devolve responsibility to the actors and harness the constructive energy and network connections of community members, while enabling the informal population to settle permanently and formalise on a broad scale. In practice, tenure security might be followed by owner-built housing, or alternatively *in situ* upgrading followed by owner-driven upgrading of housing. Vouchers might be considered for materials and services, or otherwise the options already in use by people on the ground might be investigated to identify natural pathways to housing upgrading so as to create an investment asset for the owner family.