



The dynamics of services, housing, jobs and mobility in remote Aboriginal and Torres Strait Islander communities in central Australia

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Contents

Executive summary	iii
1. Introduction.....	1
2. A theoretical reconsideration	3
3. The Mobility Survey	5
4. Labour markets, service provision and mobility in central Australia – some initial evidence	6
5. Implications for policy – some preliminary findings.....	13
References.....	16

Tables

Table 1: Demographic characteristics of initial sample.....	7
Table 2: Probability of being in employment – logistic regression results.....	12

Figures

Figure 1: Activities undertaken on trips involving an overnight stay	8
Figure 2: Can you always get access to a vehicle if you need one?.....	9
Figure 3: What stops you travelling? (people who wanted to make a trip but could not in the past 12 months).....	10
Figure 4: Money situation by labour force status	11

Shortened forms

ACR	Aboriginal Community Researchers
APY Lands	Anangu Pitjantjatjara Yankunytjatjara Lands
ATSIC	Aboriginal and Torres Strait Islander Commission
IAS	Indigenous Advancement Strategy
NTER	Northern Territory Emergency Response

Executive summary

The mobility of Aboriginal and Torres Strait Islander peoples has long been seen as posing challenges for policymakers, by being a factor that contributes to inferior educational, employment and housing outcomes and that generally frustrates mainstream models of service delivery. However, in empirical terms, very little is actually known about the nature of this mobility. Based on the initial 751 responses to a survey being conducted in remote Aboriginal communities centred around Alice Springs, this paper provides unique evidence on the extent of temporary mobility for this population and its links to demographic factors, the labour market, housing circumstances and access to services. Adopting a re-conceptualisation of mobility as a means to access things that promote wellbeing, it highlights the enduring importance of attachment to country, culture and kinship networks as drivers of Aboriginal and Torres Strait Islander mobility and, by implication, their wellbeing. Limitations to mobility, and notably the low proportion of people with a driver's licence, are found to substantially limit employment outcomes. Lower employment outcomes are also identified for those living in more crowded housing. The findings suggest moves to rationalise smaller and more remote communities are likely to negatively impact on the wellbeing and socio-economic outcomes of the people displaced. These and other results will be explored in more detail as follow-up surveys are conducted through to the end of 2016.

1. Introduction

Upon the arrival of European settlers to the shores of what we now call Australia in the late eighteenth century, the Aboriginal and Torres Strait Islander peoples encountered were seen as highly mobile, nomadic peoples. A view of that mobility as being ‘problematic’ quickly formed in the early days of colonisation and has proven to be an enduring one. The seemingly haphazard ‘wandering lifestyle’ of Aboriginal and Torres Strait Islander peoples was seen as one of the key traits that set the ‘natives’ apart from civilised society (Young 1990; Young and Doohan 1989). In pursuing the goal of assimilation of Aboriginal and Torres Strait Islander peoples into western civilisation, many policies that followed were designed in part to curtail this mobility: the removal of people from their traditional lands to reserves and missions, permit systems limiting movement, and the removal of children from their natural families (Ranzijn et al. 2009). As Governor Macquarie proclaimed in 1816:

The natives (are exhorted) to relinquish their wandering, idle and predatory habits of life and to become industrious and useful members of a community where they will find protection and encouragement (cited in Young and Doohan 1989, p. 1).

The labelling of Aboriginal and Torres Strait Islander peoples as ‘nomadic’ is now challenged since, in fact, the individual tribal or language groups all occupied separate and well-defined geographic regions, with a strong connection to their country (Ranzijn et al. 2009, p. 60). This was finally recognised in law in 1992 when the High Court’s decision in *Mabo v. Queensland No. 2* established Native Title in Australia and overthrew the idea that the country was uninhabited prior to colonisation. However, the view that Aboriginal and Torres Strait Islander peoples are highly mobile persists to this day, and this continues to be seen as frustrating their socio-economic advancement in a mainstream society that is largely built around norms of a nuclear family unit living in a single and relatively permanent ‘place of usual residence’. In particular, mobility is perceived as creating challenges for the delivery of services and the provision of infrastructure (notably housing) and as barriers to those peoples’ participation in education and the labour market (see, for example, Biddle and Markham 2013; Habibis et al. 2010, 2011; Morphy 2010; Office of the Coordinator General for Remote Services 2012; Prout 2008a, 2008b, 2011).

The tendency of Aboriginal and Torres Strait Islander peoples to disproportionately live in remote and very remote areas, relative to other Australians, also mitigates against equality in socio-economic outcomes. Remote communities are characterised by more sparse markets and networks and cannot offer the economies of scale achievable in the major cities in which 70% of non-Aboriginal or Torres Strait Islander Australians live. As best as can be gauged from the 2011 Census, almost a quarter (23.8%) of Aboriginal and Torres Strait Islander peoples live in areas classified as remote and very remote, compared with just 1.7% of other Australians. Again, this has significant implications for the provision of infrastructure and access to services, such as education and health, and for labour market outcomes.

In rejecting the self-determination approach to Aboriginal and Torres Strait Islander governance, the Howard government dismantled the Aboriginal and Torres Strait Islander Commission (ATSIC) and argued in favour of ‘practical reconciliation’. The Northern Territory Emergency Response (NTER), implemented in 2007, was perhaps the most extreme example of those interventions in terms of the extent to which Aboriginal self-determination and governance were pushed aside in the name of practical outcomes. The 2008 ‘Closing the Gap’ agenda, developed under the Rudd Labor Government, has since been the mainstay of policy towards improving Aboriginal and Torres Strait Islander outcomes; it set targets to reduce statistical inequity between Aboriginal and Torres Strait Islander and other Australians in key areas such as life expectancy and child mortality rates, education access and outcomes and in

employment. As others have noted, the pursuit of statistical equality in outcomes reinforced, to some degree, the policy shift away from self-determination and towards assimilation (see, for example, Pholi et al. 2009).

The approach to promoting improved socio-economic outcomes under the Abbott Government, known as the Indigenous Advancement Strategy (IAS), has not been set out in a comprehensive policy statement. However, it seems clear that the achievement of mainstream socio-economic outcomes will continue to take precedence over self-determination and respect for differences between mainstream and Aboriginal and Torres Strait Islander aspirations and choices. Welfare quarantining introduced under the NTER has been continued and is likely to be expanded, and the Community Development Employment Projects are set to be phased out. The IAS claims to replace the suite of existing programs with five broad programs relating to (1) jobs, land and economy; (2) children and schooling; (3) safety and wellbeing; (4) culture and capability; and (5) remote Australia strategies. The history of Australian programs for Aboriginal and Torres Strait Islander peoples suggests that objectives relating to ‘culture and capability’ are likely to be largely disregarded, with assessments of ‘advancement’ focusing on the more readily measurable indicators of mainstream socio-economic outcomes (Dockery and Milsom 2007). Consistent with this, only around 7% of IAS funding for 2015–16 has been allocated to the Culture and Capability program (Department of the Prime Minister and Cabinet 2015, Attachment K).

The withdrawal of Australian Government funding from other programs to channel into the IAS has prompted the Western Australia Government to indicate that it will no longer provide services to some of the less ‘viable’ (smallest and most remote) Aboriginal communities in that state, and this may be a portent for a wider rationalisation of remote communities nationwide. The Indigenous Jobs and Training Review, chaired by Andrew Forrest, has backed moves to expand welfare quarantining and reiterated the emphasis on education and jobs as the key to addressing the disadvantage experienced by Aboriginal and Torres Strait Islander peoples. Indeed, the dysfunction and poor living standards perceived to be widespread in remote Aboriginal and Torres Strait Islander communities has been at the forefront of this policy debate.

While Aboriginal and Torres Strait Islander geography and mobility are widely seen as major contributors to these many policy challenges, there is in fact very little evidence on the extent and drivers of that mobility. As Taylor noted in 2006 ‘policy makers who contemplate the effects of temporary mobility on the spatial pattern of demand for services do so in an information vacuum’. (2006, p. 13). In a more recent review of the literature on Aboriginal and Torres Strait Islander mobility covering over 50 publications, Dockery and Colquhoun conclude:

This sizeable volume of existing and relatively recent works might well lead to the impression that the contemporary mobility patterns of Aboriginal Australians are well understood. Rather, the truth is that this literature rests upon just a handful of studies that are based on methodologies and data well suited to the analysis of Aboriginal temporary mobility. (2012, p. 19)

Addressing this evidence gap and providing a more concrete basis for policy formulation is the motivation behind the Population Mobility and Labour Markets project of the Cooperative Research Centre for Remote Economic Participation (CRC-REP), which is currently conducting surveys of Aboriginal and Torres Strait Islander peoples living in remote communities in central Australia. This paper provides a review of some of the early results from this fieldwork (hereafter the ‘Mobility Survey’). The next section discusses a generalised theoretical approach developed to analyse mobility and sets out why it is important in this particular context. Section 3 gives an overview of the survey methodology and the current status of

the field work. Initial results are presented in Section 4, and Section 5 concludes with a discussion of potential implications for policy.

2. A theoretical reconsideration

Framing the issues and developing the methodology and constructs for the Mobility Survey involved an extensive process of consultation with Aboriginal and Torres Strait Islander people, policymakers and other stakeholders and an extensive review of existing literature. This led to a reconsideration of the way in which the mobility of Aboriginal and Torres Strait Islander peoples is viewed as ‘problematic’, and a proposal for adopting instead a wellbeing perspective (Dockery forthcoming). Before discussing survey results and translating these into policy implications, it is pertinent to review the rationale behind that proposal.

Among the key lessons to be drawn from the existing literature is the remarkable persistence of cultural drivers of the mobility of Aboriginal and Torres Strait Islander: maintaining connections to kinship networks and to country (Dockery and Colquhoun 2012, p. 19). As Memmott et al. (2006, p. 107) note, ‘Attachment to place and community prevail, irrespective of a history of changing government policies. There appears no reason to expect that these attachments will change in the foreseeable future.’ A further point that needs to be acknowledged is that contemporary Aboriginal and Torres Strait Islander mobility is not conditioned solely by cultural factors, but is shaped by past and current policies and events. For example, some mobility is generated by movement back to visit traditional lands as a consequence of prior displacement (Young and Doohan 1989, pp. 2, 15). Government policies relating to housing, transport, education and so on significantly impact upon patterns of mobility (Habibis et al. 2010, pp. 20–22; Young and Doohan 1989, p. 27). Contemporary mobility must be understood in the context of these impositions along with the enduring and evolving aspirations of Aboriginal and Torres Strait Islander Australians.

The view of such mobility as problematic and impeding socio-economic progress aligns with the wider discourse of policy aimed at Aboriginal and Torres Strait Islander peoples over the years, in which their culture is seen as a barrier to improving socio-economic outcomes, and that Aboriginal and Torres Strait Islander peoples face a trade-off between maintenance of their traditional culture and having socio-economic equality with other Australians (Dockery 2010). Notwithstanding empirical evidence to the contrary (Dockery 2012, 2010), the underlying acceptance of culture as a source of disadvantage inevitably results in hidden pressures for assimilation pervading policy formulation.

Dockery and Colquhoun (2012) summarise existing models and approaches from a range of disciplines seeking to explain human mobility, as follows:

- Neo-classical economics: Based on the paradigm of rational, utility-maximising individuals, this approach has been applied to explain rural to urban migration during a country’s economic development (Lewis 1954), and the continuation of such a rural to urban drift despite higher rates of urban unemployment as workers seek the higher urban wages on offer to maximise expected utility (Harris and Todaro 1970). A broader theory of ‘compensating differentials’ has since emerged to account for differences in equilibrium wages across regions due to workers getting utility from other factors, such as climate, with worker migration equating expected utility across regions (see Rosen 1986).
- Gravity models: Movement between places is empirically modelled in terms of forces of attraction and the ‘distance’ between them. In this sense distance refers not to spatial distance, but refers to anything

that bears upon the cost of migration, be that a financial or psychological cost such as differences in languages or culture between the source and destination regions.

- **Resource variability:** McAllister et al. (2009) develop a model specifically related to arid environments. Given the distribution of resources in such environments is typically highly variable, they follow financial portfolio theory in demonstrating that a range of survival processes, including physical movement, can be seen as alternative ways to manage this 'risk' through diversification of resources access across time and space. Nomadism, for example, involves moving across space in search of resources. It involves costs in the form of time, energy and information gathering; however, there is a trade-off between these and the cost of storing resources.
- **Aboriginal and Torres Strait Islander mobility:** Based on studies of the social networks of the Yolngu people of Northern Australia, Morphy (2010) proposes a three-layered model capturing sacred geography and associated settlements, nodal individuals and kin networks to explain mobility patterns. Sacred geography and nodal individuals are interrelated, and in turn kinship networks are built around these individuals. Such a model, argues Morphy, is far more appropriate to capturing the essence of Yolngu patterns of mobility than the 'bounded container' models underpinning standard demographic categories (2010, p. 366).

Each of these models been developed and applied with regard to specific contexts and accordingly attach different weights to the many possible drivers and measures of mobility. The theoretical model adopted and what gets measured shape the way policymakers view mobility, inevitably elevating attention afforded to some drivers and characteristics of mobility while downplaying others.

Dockery (forthcoming; 2014) suggests that it is instructive to adopt a simple and more generalised conceptualisation of mobility based on wellbeing:

Mobility is a simply a means to accessing those things that contribute to wellbeing and avoiding things that contribute to illbeing.

This conceptualisation encompasses all the above models, but is perhaps closest to that of neo-classical economics, which is built around the underlying notion of a utility function. It is also consistent with the medical and gerontological literature, in which physical limitations to mobility have been shown to impact upon wellbeing, through effects on functional health, independence, reciprocity, self-esteem and self-identity (Bourret et al. 2002; Schwanen and Ziegler 2011). Mobility has been identified as the most significant factor shaping elderly people's perceptions of their health and wellbeing (Bourret et al. 2002, p. 339).

What is the value in adopting this very generalised view of mobility? Its importance lies in the implications for policy formulation and evaluation in cross-cultural settings, with particular relevance for Aboriginal and Torres Strait Islander and other First Nations peoples. If one accepts that mobility is undertaken as a means to achieving wellbeing, or avoiding illbeing, it becomes difficult to understand in what possible sense mobility can be seen as 'problematic'. If one accepts that the objectives of policies and programs should ultimately relate to the maximisation of wellbeing, then seeing mobility as a means to wellbeing aligns the conceptualisation of mobility with those objectives. The wellbeing approach calls for the realignment of priorities, definitions and measurement to afford greater weight to those things that matter most in people's lives.

Demographic measures and constructs tend to be based around social norms, and may lack applicability to minority groups within society. Equally, approaches that are based on statistical inference, as gravity

models are, will reflect the mobility patterns of the majority. Tribal ceremony and cultural obligations, attachment to homelands or the wellbeing derived from traditional hunting and gathering activities do not feature in mainstream models of mobility. When the preferences of a minority group differ substantially from the majority, their own mobility patterns will be invisible to analysts or, worse, appear anomalous or dysfunctional. This can be demonstrated by two salient examples relating to Aboriginal and Torres Strait Islander peoples:

- The most commonly used indicators of mobility are based on a change in a person's 'place of usual residence' as determined in the Census. However, many Aboriginal and Torres Strait Islander people have a range of places where they would regularly stay overnight and could expect to be welcomed. The Census construct of a 'visitor' is similarly less clear cut for Aboriginal and Torres Strait Islander households in remote Australia.
- Mobility is often measured by movements between geographical areas, such as between states and between local government areas. However, these boundaries on maps have little, if any, relevance for Aboriginal and Torres Strait Islander peoples. If maps were instead drawn on the basis of language or tribal groups, one would likely get a very different picture of Aboriginal and Torres Strait Islander mobility.

Hence viewing mobility as a means to access the things that promote wellbeing exposes the prism through which governments perceive the mobility of such peoples as problematic. Rather than seeing mobility as a problem and attempting to enact policies that promote conformity with the mainstream, a wellbeing approach to mobility instead focuses attention on the needs of those people and the contributing factors to their wellbeing that motivates their mobility patterns.

3. The Mobility Survey

The objective of the CRC-REP's Population Mobility and Labour Markets project is to enhance economic participation and livelihoods of Aboriginal and Torres Strait Islander people living in remote Australia through:

1. a better understanding of the factors driving temporary mobility
2. empirical estimates of the extent and patterns of temporary mobility.

It is hoped that this evidence base will contribute to improved planning and decision-making by communities themselves, service providers, policymakers and employers.

The methodology developed aimed to survey a sample of individuals in remote communities in central Australia, with an initial survey collecting baseline data progressively rolled out across communities from May 2014. Four follow-up surveys will be conducted with those same individuals collecting detailed information on recent trips. The four follow-up surveys are to be roughly three months apart to capture seasonal variation in mobility over a full year and are expected to be completed at the end of 2016. A two-stage sampling frame was designed consisting of a sample of 25 remote Aboriginal communities around Alice Springs, and within those communities a sample of individuals. The scope for the communities sample was any remote Aboriginal community in which people would potentially access Alice Springs as a regional service centre; however, residents of some of the communities may also have travelled to other regional centres, such as Tennant Creek or Katherine. The sample was targeted to give reasonable

representation of communities by size (population) and proximity to Alice Springs and of the language groups around Alice Springs. This was to include a handful of communities in the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands to the south of Alice Springs and across the border in South Australia. However, at the time of writing it had not been possible to gain approval to work in those communities. It is anticipated that the final sample will now consist of 21 remote communities.

In-scope individuals within those communities included all people aged 15 and over who were happy to participate. The target samples were stratified by age and gender based on Census population data for each community. The target sampling-to-population ratio declines with the population of the community, with the overall ratio designed to produce a sample of 1,500 respondents to the initial questionnaire and with the hope of 750 people responding to all five surveys after allowing for attrition.

The initial questionnaire and a template for the follow-up questionnaires were developed following focus groups conducted in two remote communities (Ntaria and Ltyentye Apurte) and with policymakers, service providers and other community representatives and stakeholders. The questionnaires were composed using the iSurvey software to be administered using iPads. These were tested and revised by trained Aboriginal Community Researchers (ACRs), who are employed by Ninti One's Business Development Unit. The ACRs can usually conduct surveys in language where the respondent prefers. The first of the follow-up surveys was further refined following a review of the experiences with the initial questionnaire instrument and further testing by ACRs. This process helped to identify key questions and develop the questionnaire constructs, and also led to the omission of questions that were considered culturally inappropriate.

The decision to concentrate on communities around Alice Springs rather than a sample more representative of remote Australia reflected the view that, given the available budget and the cost of undertaking field work in these settings, it was better to study one region in depth. Spreading the sample across a more geographically dispersed region risked leaving us being able to say very little about important relationships because they would be lost in the myriad of contextual differences. While the sample design served as a guide, the reality of working in remote communities is that samples will always be 'convenience samples' to some extent. Soliciting information of acceptable quality requires us to work in communities where we have a 'warm start', and hence the selection of communities was biased towards those with which Ninti One had established working relationships. Undoubtedly this similarly applies to the selection of individuals within the communities on the basis of familiarity with the ACRs.

The surveying began in May of 2014 and is scheduled to continue through to the end of 2016. At the time of preparation of this paper, data from 751 initial surveys had been collected across 20 communities. Just over 200 of the first of the follow-up surveys had been completed by those respondents; however, the analysis presented here focuses on the data generated in the baseline survey. It should also be noted that the full process of checking, validating and cleaning the data has yet to be completed.

4. Labour markets, service provision and mobility in central Australia – some initial evidence

As noted, data from 751 initial surveys were available at the time of this analysis. Table 1 provides a basic demographic profile of those respondents. The relatively young profile of the sample is in line with the wider profile of Aboriginal and Torres Strait Islander people relative to the overall population. The remarkable figure from this table relates to the proportion of individuals surveyed – 96.5% – who reported

that they lived on their homelands.¹ To repeat, further validation of the survey results is required, but the initial impression is that Aboriginal people living in remote communities in central Australia very rarely live anywhere other than on country they consider to be their homelands. It seems there is some migration for younger people, but older people either remain on country or move back to their homelands. Undoubtedly the figure would be markedly different for Aboriginal and Torres Strait Islander peoples living in regional centres and non-remote Australia, but they reaffirm the message from the existing literature of the attachment to country being a major factor shaping mobility and geography.

Table 1: Demographic characteristics of initial sample

Age group	Number	Male (%)	Partnered (%)	Live on homelands (%)
Aged 15–24	173	39.9	55.5	89.6
Aged 25–39	297	39.4	71.0	99.0
Aged 40–55	183	34.4	67.8	98.4
Aged 55 and over	98	44.9	56.1	98.0
Total	751	39.0	64.7	96.5

On average, respondents reported speaking an average of 1.6 Aboriginal languages, but with some speaking as many as nine; this is typically in addition to English. The most common Aboriginal languages spoken were Warlpiri (35% of respondents) and Pitjantjatjara (28%). Less than 4% reported not speaking any Aboriginal language.

In terms of housing circumstances, the initial survey asked respondents how many adults lived with them in their house. The results indicate an average adult occupancy of 4.4, with a mode² of 4 adults. In 2.6% of cases respondents reported living in houses with 10 or more adults. More detailed information on household composition by age and gender (including the number of children) is being collected in the quarterly follow-up surveys.

4.1 Services, mobility and immobility

The initial survey asked respondents whether they felt the things they needed are available in their community, or whether they have to travel to access these. Of the choices provided, the most common response was ‘Yes, things are available here or close by’, nominated by just under 50% of the respondents. Thirty-two percent indicated ‘Most of the things we need are here but sometimes we have to travel to access some things’, and only 7% selected the category suggesting the lowest level of access: ‘No, we need to travel to access most services or to get what we need’.

Questions were also asked about a range of specific services, and whether individuals needed to travel away from the community to access these and, if so, how often and where they went. As determined by the sampling frame, the most common place people went to access services was Alice Springs. In descending order, the services people left the community for most often were shopping for food and groceries (estimated average of 9.6 times per year), other shopping (9.0 times per year), banking (3.0 times per year), health (2.2 times per year) and once per year or less frequently for visiting Centrelink, housing agencies, getting cars serviced or repaired, looking for work or for education and training.

¹ Note that the term ‘homelands’ may have different interpretations for different people. It may not necessarily relate to being associated with a traditional owner group and may include people who have developed a strong connection to the community.

² ‘Mode’ is the value that appears most for a given variable.

Some of these trips may be combined, so that summing the number of times travelled for each of the individual services would greatly over-estimate the actual number of trips. The responses indicate that people travel away from the community a minimum of once every five weeks. An additional question asked people, ‘Overall, how often do you choose to travel somewhere else to access services?’ the modal response was ‘Every couple of months’. Assigning numbers to the response categories (e.g. 52 for ‘Once a week’ and 26 for ‘Every couple of weeks’) produces an estimated number of times people travel away from their community to access services of 19.5 per year, or slightly more than once every three weeks.

The distance by road between these communities and Alice Springs ranges from 85 kilometres for Ltyentye Apurte to 883 kilometres for Lajamanu. Residents of Lajamanu mostly travel to Katherine for services. For individuals who indicated that the place they usually go to access services was Alice Springs, and taking into account the number of times they go and recalling that this requires both an outward trip and a return trip, we can estimate that they travel an average of 852 kilometres per month to access services, with one estimate as high as 15,000 kilometres per month. Much of this will be on unsealed roads. It seems, however, that people are generally quite happy to make these trips. When asked how they felt about going when they did travel to access services, a total of 90% indicated they didn’t mind going (36%), or felt good (47%) or very good (8%) about going.

To gauge the extent of ‘temporary mobility’, the definition adopted was any trip that involved an overnight stay outside of the community. This is a more restrictive definition than travelling away from the community to access services, which may or may not involve an overnight stay. People were asked where they went most often and stayed overnight. Around half the sample reported making such trips. The main reason given for going was again shopping (50% of trips), with the second most common reason being to visit family and friends (31%). Other reasons were cited far less frequently, with football third at just 4% and to see a doctor or other health services at 3%. When asked what people did on their trips, as opposed to the main reason for going, the results confirm the importance of kinship, culture and country as important factors in the mobility of Aboriginal people (see Figure 1). Visiting family and friends becomes the most frequently cited activity, while attending cultural events, hunting or collecting bush tucker and visiting homelands also feature.

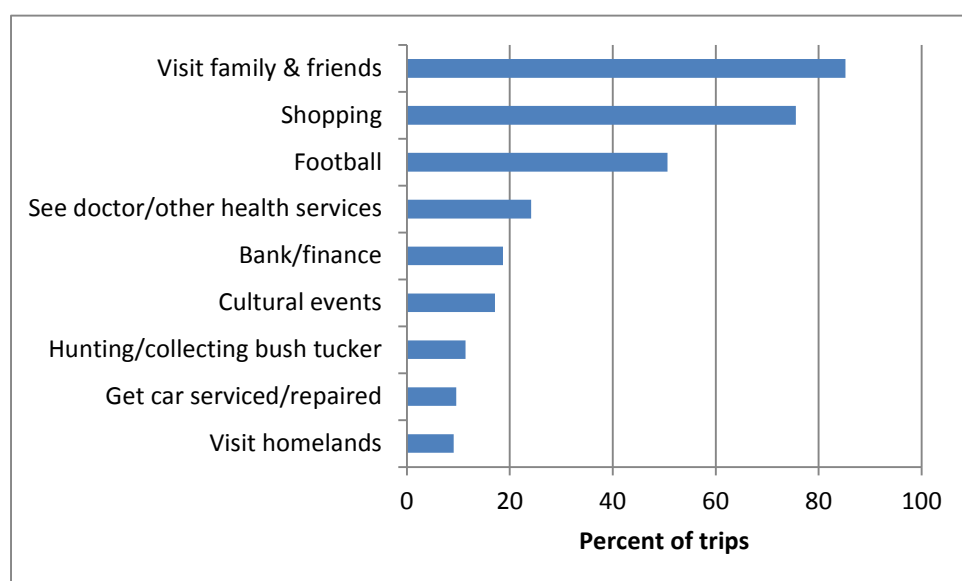


Figure 1: Activities undertaken on trips involving an overnight stay

Note: Figure shows the most common of 24 possible responses and a separate ‘other’ option

For people who do make trips in which they stay overnight, it is estimated from the survey that they make around 24 such trips per year. The main methods of travelling were driving (33%), getting a lift with others (29%) and by bus (24%). On average, people reported staying away for 4.5 nights on each trip, predominately staying with family.

Despite this evidence of a high level of movement, there is also evidence of quite significant limitations to mobility. Overall, public transport is limited or non-existent in these communities. Some are on the route serviced by the Bush Bus, a commercial company that runs services into and out of Alice Springs. Other communities operate their own community bus or van. In terms of self-driving, of the people aged 17 and over, less than half (41%) held a current driver's licence. The survey also collected information on access to vehicles. The results, shown in Figure 2, demonstrate that many people cannot access vehicles when required. When asked whether they could get access to a vehicle if they needed to, cumulatively, the responses indicating the lowest levels of access of 'No', 'Only in an emergency' and 'Not very often' sum to 25%: effectively a quarter of respondents expressing substantially limited access to a vehicle relative to their needs. If the category 'Sometimes' is included, the cumulative proportion indicating limited access rises to one in two.

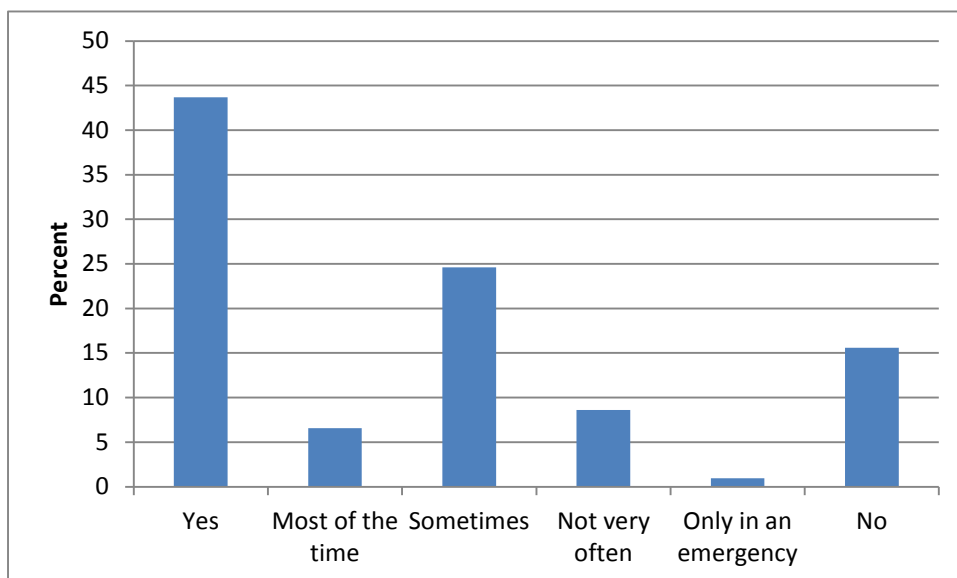


Figure 2: Can you always get access to a vehicle if you need one?

Note: Figure shows the most common of 11 possible responses and a separate 'other' option

When asked if there were times in the past year that they wanted to travel but could not, almost one in three people responded in the affirmative. Among those, the most common response was 'not enough money'. Cultural and family reasons also feature prominently (see Figure 3). There are also a range of reasons commonly cited relating to the lack of transport access, including 'can't get a ride', 'no safe vehicle' and 'no licenced driver'. In many cases, 'not enough money' might also reflect transport access, in terms of the affordability of bus fares, vehicles, vehicle repairs or petrol.

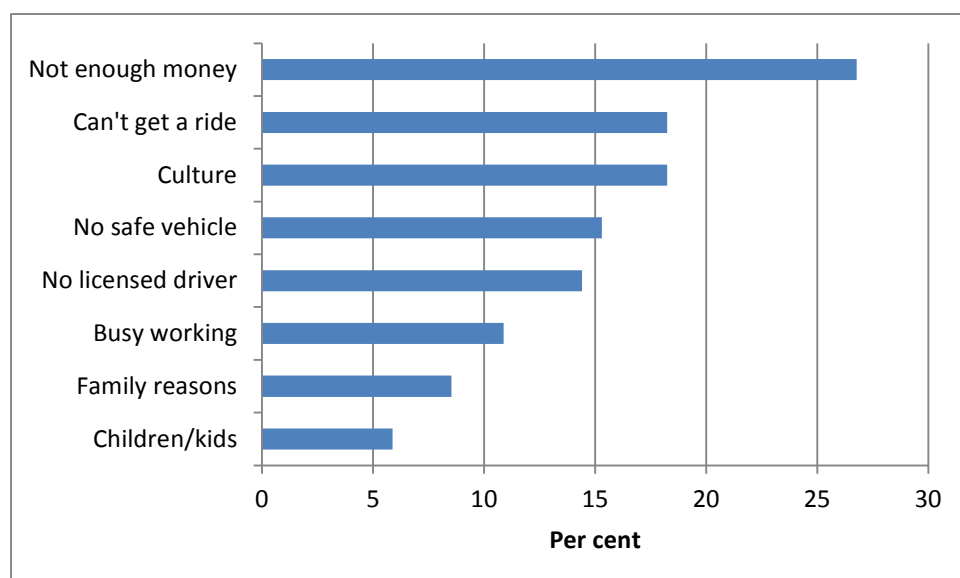


Figure 3: What stops you travelling? (people who wanted to make a trip but could not in the past 12 months)

Mobility and economic and labour market outcomes

Clearly, circumstances in these communities are far removed from those in mainstream labour markets. Only just over a third of people interviewed reported that they were working for wages: 13% working full time and 24% part time. Of the people not working, less than half (45%) indicated that they had been looking for work. Although the questions are not exactly the same as those used in the official Australian Bureau of Statistics definitions for determining labour force status, they roughly translate to a very high unemployment rate of 44%, but a participation rate (65%) that is not so different from the current national figure. Among the people who were looking for work, by far the most common barrier to finding work was 'not many jobs available here' (54% of those looking for work), with health reasons and looking after children a distant second and third, respectively.

In terms of educational attainment, the survey asked respondents what the highest year of school was that they had completed. Feedback suggested this question was difficult to answer for some of the older respondents as they had been to the mission school, where no year levels were articulated as such. With this limitation in mind, the responses indicate that 21% never went to school or completed primary school only; a further 28% completed Year 9 or less of high school; and 42% completed Year 10. Only 9% reported completing Year 12. For post-school qualifications, a seemingly high 41% of people reported having a certificate, while just 4% reported having completed a trade or diploma and less than 1% reported having tertiary qualifications (degree or higher).

A very high proportion of respondents were welfare recipients. When asked where people got their money from, by far the most common source selected was 'government (Centrelink, child and family, pension, etc.)', accounting for 71% of respondents. Wages from work or 'casual work' were indicated by 29% of people, and a further 4% indicated Community Development Employment Projects (CDEP) or other community programs as a source of income. A question was asked to try to understand people's financial situation that was relevant to the remote community context (see Figure 4). The modal response on the scale was 'I keep just enough money to get us through to the next pay'. Figure 4 shows the pattern of responses by labour force status, with the 1–6 scale showing an improving money situation from left to right. The benefits of employment in terms of financial

prosperity appear relatively muted, with a similar proportion of people in full-time and part-time employment and unemployed indicating they keep just enough money to get by. The mean³ of the 1–6 scale varies from 3.9 for the full-time employed to 3.6 for the part-time employed and 3.2 for both the people unemployed and those not in the labour force. The higher mean for those in full-time employment is significant in each case by the standard t-test (at the 5% level relative to the part-time employed and 1% level for those unemployed or not in the labour force).

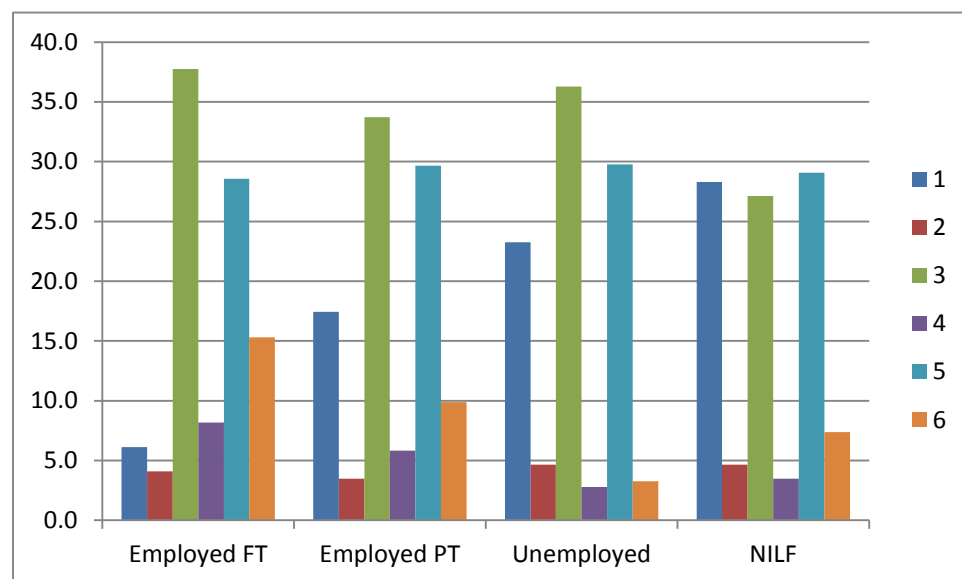


Figure 4: Money situation by labour force status

Notes: 1 = 'I often run out of money before payday'; 2 = 'I sometimes have to borrow or book down'; 3 = 'I keep just enough money to get us through to the next pay'; 4 = 'Most weeks there is money left over, which I spend'; 5 = 'I save up sometimes'; 6 = 'I always save'.

As noted above, less than half of the respondents had a current driver's licence, and many face limited access to transport. This is associated with a stark difference in employment rates: among the people who have a licence, 55% of them are working for wages; but of the people without a licence, this figure is only 23%. The unemployment rate among those with no driver's licence is a staggering 61%.

Bearing in mind the very preliminary nature of this data, a basic multivariate logit model was used to estimate the probability of respondents being employed, based on the other variables collected. The results are presented in Table 2. These are reported in the form of odds ratios, which show the estimated effect of a variable on the probability of being in employment (working for wages) relative to its default category⁴. A ratio of 1 indicates no difference between two categories; numbers higher or lower than 1 indicate increasing distance from the default category. The odds ratio of 1.05 for males, for example, indicates that males are estimated to be 5% more likely (that is $1.05 - 1.00 = +0.05$) than a female to be in employment (though in this case the estimated effect is not statistically significant from zero). The odds ratio of 0.48 on being aged 15–24 years indicates that those young people are 52% less likely ($0.48 - 1.00 = -0.52$) to be employed than a person aged 25–44 years (the default category). For continuous variables – number of adults living in the household, vehicle access

³ The 'mean' is the arithmetic average in the usual sense: the sum of the values of the variable divided by the number of observations.

⁴ The default categories in Table 2 are those with dashes in the results columns, or, in the case where there are only two options, such as male and female, the category that is not given.

and log of the distance to Alice Springs – the estimated effect is the change in the likelihood of being employed for each one unit increase in that variable.

The results from this basic model suggest no significant difference in the likelihood of being employed between the men and women living in these communities. Employment patterns do follow the ‘inverted U’ pattern with age that is commonly found in labour markets: employment likelihood increases with age up to the prime working age of 25–44 years, and then drops off again. However, in this sample people aged 45–54 have similar employment rates to those in their prime years, but employment drops off sharply for those aged 55 years and over. Being partnered does have a positive effect on employment in typical labour markets, and this is often interpreted as capturing unobserved positive labour market traits. No such effect is observed in this sample. Educational attainment also increases the probability of people being employed in other labour markets, and that is true in this study. Here the likelihood of being in employment for people with a trade/diploma or university qualification is estimated to be around 40% higher than for those who completed Year 12 and/or possess a certificate. However, the estimates are not statistically significant, likely due to the very low proportion of individuals in the sample with those higher level qualifications.

Table 2: Probability of being in employment – logistic regression results

Variable	Odds ratio	p>Chi sq.
Male	1.05	0.812
Age:		
15–24 years	0.48	0.002
25–44 years	—	—
45–54 years	0.83	0.462
55–64 years	0.27	0.002
65 and over	0.26	0.017
Married/partnered	0.97	0.875
Number of additional adults living in household ^a	0.88	0.003
Highest education level		
Never went/primary school	0.25	0.000
Some high school but not Yr 12	0.50	0.000
Finished Yr 12/post-school cert.	—	—
Trade qualification or diploma	1.42	0.468
University degree or higher	1.41	0.725
Has a current licence	3.37	0.000
Vehicle access [1–6]	1.04	0.486
Log distance to Alice Springs	0.63	0.000
Number of respondents	724	
Log likelihood	190.51	0.000

Notes: a. Number of adults in addition to self, excluding partner.

There are a number of results that reflect on the dynamics of space, housing and the labour market. The more adults residing in the household, in addition to the respondent’s partner (where relevant), the less likely they were to be employed. This may reflect an effect of crowding or of insecure tenure, or of disincentives to earn income created by ‘humbugging’ within the household, or some other omitted

variable bias. The result must be explored more thoroughly before any conclusions can be made. However, the effect is sizeable and highly significant in statistical terms: each additional adult living in the household reduces an individual's probability of being employed by 12%. Typically there are 2–3 adults living in the household in addition to the individual and their partner.

Even more noteworthy, is that having a licence increases the probability of being employed by more than three times! We must be cautious of making inferences regarding causality, as the causality could run the other way, that is, people in employment are more likely to gain and retain a licence. However, not all evidence points to this explanation. If 'reverse causality' were the main factor, we would expect it would be very strong with relation to vehicle access. Employment in remote Australia very often generates higher vehicle access, but we do not observe a significant effect between the probability of employment and vehicle access. This suggests the effect flowing from employment may not be so substantial. Again, this is a result that needs to be explored further, but the bottom line is that Aboriginal and Torres Strait Islander people living in remote communities are very unlikely to be employed if they do not have a current driver's licence.

Finally, there is evidence that employment opportunity falls off with remoteness, which in this instance is measured as the log of the distance by road from Alice Springs. The interpretation of the estimate is that a person's likelihood of being in employment falls by 37% for each one unit increase in the log of distance from Alice Springs. A one unit change in the log of the distance would roughly represent the difference between a community at the mean distance from Alice Springs (344 km) and the very furthest community (Lajamanu, 883 km). As another example, the estimated effect of being in Ntaria, 127 kilometres from Alice Springs, as opposed to Ltyentye Apurte, 85 kilometres from Alice Springs, is to reduce an individual's employment probability by around 15%, other factors held constant.

5. Implications for policy – some preliminary findings

This paper presents some very preliminary quantitative evidence on interrelationships between mobility, access to services (including housing) and labour market outcomes. The initial picture is of a population who have low levels of formal educational attainment, low rates of employment, a high incidence of welfare receipt, and who travel vast distances. Despite this, many also faced significant barriers to travel. While direct measures of crowding were not collected in the initial survey, we find that many people live in shared housing with four or more adults in addition to themselves and their partner.

Substantial distances are travelled to access basic services, notably shopping for food and groceries. However, people also appear relatively satisfied with the availability of services in their community and are content to travel the distances they do. The survey also reinforced the findings of the previous literature in identifying kin, culture and country as key drivers of temporary mobility (Memmott et al. 2006; Morphy 2010). As would be expected, Aboriginal and Torres Strait Islander people in central Australia combine the trips they make for shopping and accessing other services to visit friends and family and engage in other activities, including cultural activities and football. When they make trips involving an overnight stay, people mostly stay with family and friends, suggesting an established, welcoming and reciprocal network of accommodation supporting this mobility along kinship lines.

Much has been made of the problem of the high level of mobility of Aboriginal and Torres Strait Islander people in remote Australia frustrating delivery of services and infrastructure and limiting labour market engagement. The evidence in fact suggests much the reverse – barriers to mobility substantially limit service access and socio-economic engagement. In particular, not having a driver's licence is associated

with a dramatic reduction in the likelihood of a person from a remote community having a paid job. This issue was also raised in the Forrest Review (Forrest 2014) on jobs and training, which noted that in many cases, people's licences had been suspended due to non-payment of fines or other traffic infringements. The Review recommended a system of provisional 'locked' licences for employment purposes to ensure people can gain and keep jobs when this happens. We would support this recommendation, but argue more generally that the focus needs to shift to the limitations to mobility faced by Aboriginal and Torres Strait Islander people living in remote communities, and away from the high degree of mobility.

Other implications for policy will arise as the survey sample increases, the follow-up surveys are conducted and further analyses are undertaken. The early evidence makes it clear that the economies of these communities are far removed from those of urban Australia. In order to make good policy, it is important to understand how people will respond to incentives and disincentives, and this is particularly relevant to policies of an assimilationist nature, whether overtly or otherwise, such as the Closing the Gap framework and the forces for rationalising smaller and more remote communities. In terms of spatial geography and mobility, we have argued that for policymakers to properly understand how people will respond to incentives, they need to view mobility through a wellbeing prism. In terms of influencing mobility or where people live, it needs to be understood that people will not sever their connections to homelands, kinship networks and cultural obligations, for this is what their wellbeing is built around. These connections have proven resilient to hundreds of years of policy – at times quite extreme policy – that has attempted to manipulate them.

At best the rationalisation of smaller communities will lead to movement to more populous remote communities. Given the main reason highlighted for people not working in the communities surveyed is simply the lack of jobs, this is unlikely to greatly enhance employment outcomes. Outcomes may well be even worse if people move to regional centres or capital cities. With low education levels, limited work experience, loss of social capital networks and in many cases no vehicle or driver's licence, their employment prospects would be similarly poor, but now in an environment lacking social and cultural support. It seems unlikely that economic gains would outweigh the many potential detrimental effects of such migration. The alternative of creating jobs through community economic development and greater integration of what Aboriginal and Torres Strait Islander people already do in those communities with what is considered 'employment' seems more likely to succeed in generating improved outcomes.

We find evidence that models of service delivery/availability have a substantial causal impact on mobility, and also that employment opportunity falls off with remoteness (measured here as distance from Alice Springs). In economics the essence of distance is how it equates to cost – it is not the physical space that matters. These costs can be changed via infrastructure spending, sealing roads and improved public transport, vehicle access, telecommunications and so on. The estimates generated here of the distances travelled and their implications for employment outcomes may provide grounds to reconsider the cost and benefits of these alternative policies and existing models of service provision.

The preliminary finding that higher adult occupancy rates in houses reduce employment opportunity is interesting and needs to be explored further. We do not know if this is a crowding effect, financial incentives effect, or if the occupancy rate is simply acting as an indicator of a more general lack of infrastructure and funding in those communities with more adults per home. Or are the people who are out of work and on lower incomes just more likely to live in larger households? Isolating the cause would have implications for policy. In future work we will be able to test this through multilevel modelling that estimates 'within community' effects.

There is also considerable future potential to address research questions by merging the data with external data relating to the communities, such as population, audits of what services and infrastructure are available within the community (including educational institutions and cultural facilities), and whether or not it is serviced by the Bush Bus. A key intention for this paper, and for a number of planned papers to be completed and released in the near future, is to increase awareness of the data being generated by the Mobility project and of its potential to address questions of relevance to the communities, policymakers and other stakeholders.

References

- Biddle N and Markham F. 2013. *Mobility*. CAEPR Indigenous Population Project, 2011 Census Papers No. 9, Centre for Aboriginal Economic Policy Research, ANU, Canberra.
- Bourret EM, Bernick LG, Cott CA and Kontos PC. 2002. The meaning of mobility for residents and staff in long-term care facilities. *Journal of Advanced Nursing* 37(4), 338–345.
- Department of the Prime Minister and Cabinet. 2015. *Impact on service quality, efficiency and sustainability of recent Commonwealth Indigenous Advancement Strategy tendering processes by the Department of Prime Minister and Cabinet*, Submission to the Senate Finance and Public Administration References Committee, April.
- Dockery AM. 2010. Culture and Wellbeing: The case of Indigenous Australians. *Social Indicators Research* 99(2), 315–332.
- 2012. ‘Do traditional culture and identity promote the wellbeing of Indigenous Australians? Evidence from the 2008 NATSISS’, in Hunter B and Biddle N. (Eds.) *Survey analysis for Indigenous policy in Australia: Social science perspectives*, Research Monograph No. 32, Centre for Aboriginal Economic Policy Research, Australian National University E Press, Canberra, pp. 281–305.
- 2014. *Reconceptualising mobility for Aboriginal and Torres Strait Islander Australians*. CRC-REP Working Paper CW015. Ninti One Limited, Alice Springs.
- forthcoming. A wellbeing approach to mobility and its application to Aboriginal and Torres Strait Islander Australians. *Social Indicators Research*, <http://link.springer.com/article/10.1007%2Fs11205-014-0839-8>.
- Dockery AM and Colquhoun S. 2012. *Mobility of Aboriginal and Torres Strait Islander people: A literature review*. CRC-REP Working Paper CW004, Ninti One Limited, Alice Springs.
- Dockery AM and Milsom N. 2007. *A review of Indigenous employment programs*. National Centre for Vocational Education Research, Adelaide.
- Forrest A. 2014. *Creating Parity: The Forrest Review*. The Department of the Prime Minister and Cabinet. Commonwealth of Australia, Canberra.
- Habibis D, Birdsall-Jones C, Dunbar T, Gabriel M, Scrimgeour M and Taylor E. 2010. *Improving housing responses to Indigenous pattern mobility*. AHURI Positioning Paper No. 124, Australian Housing and Urban Research Institute, Southern Research Centre, Brisbane.
- Habibis D, Birdsall-Jones C, Dunbar T, Gabriel M, Scrimgeour M and Taylor E and Nethercote M. 2011. *Improving housing responses to Indigenous pattern mobility*. AHURI final Report No. 162, Australian Housing and Urban Research Institute, Melbourne.
- Harris J and Todaro M. 1970. Migration, unemployment and development: a two-sector analysis. *American Economic Review* 60(1), 126–142.
- Lewis WA. 1954. Economic development with unlimited supplies of labour. *Manchester School of Economic and Social Studies* 22, 139–91.
- McAllister RJ, Stafford Smith M, Stokes CJ and Walsh F. 2009. Patterns of accessing variable resources across time and space: desert plants, animals and people. *Journal of Arid Environments* 73(3), 338–346.

- Memmott P, Long S and Thomson L. 2006. *Indigenous mobility in rural and remote Australia: Final report*. AHURI Final Report No. 90, Australian Housing and Urban Research Institute, Queensland Research Centre, Brisbane.
- Morphy F. 2006. Lost in translation? Remote Indigenous households and definitions of the family. *Family Matters* 7, 23–31.
- Morphy F. 2010. (im)mobility: regional population structures in Aboriginal Australia. *Australian Journal of Social Issues* 45(3), 363–382.
- Office of the Coordinator General for Remote Services. 2012. *The Report of the Office of the Coordinator General for Remote Services*. Progress Report No. 5, Northern Territory Government, Darwin.
- Pholi K, Black D and Richards C. 2009. Is ‘Close the Gap’ a useful approach to improving the health and wellbeing of Indigenous Australians. *Australian Review of Public Affairs* 9(2), 1–13.
- Prout S. 2008a. *On the move? Indigenous temporary mobility practices in Australia*. CAEPR Working Paper No. 28/2008, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- 2008b. *The entangled relationship between Indigenous spatiality and government service delivery*. CAEPR Working Paper No. 41/2008, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- 2011. Vacuums and veils: Engaging with statistically ‘invisible’ Indigenous population dynamics in Yamatji Country, Western Australia. *Geographical Research* 47(4), 408–421.
- Ranzijn R, McConnochie K and Nolan W. 2009. *Psychology and Indigenous Australians: Foundations of Cultural Competence*, Palgrave Macmillan, Melbourne.
- Rosen S. 1986. The theory of equalizing differences. In Ashenfelter O and Layard R. (Eds.) *The Handbook of Labor Economics*, Vol. 1, pp. 641–692, Elsevier, New York.
- Schwanen T and Ziegler F. 2011. Wellbeing, independence and mobility: an introduction. *Ageing & Society* 31, 719–733.
- Taylor J. 2006. *Population and diversity: policy implications of emerging demographic trends*, CAEPR Discussion Paper No. 283/2006, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Young E. 1990. Aboriginal population mobility and service provisions: a framework for analysis. In B Meehan and N White (Eds.) *Hunter-gatherer demography: Past and present*, Oceania Monograph 39, pp. 186–195. University of Sydney, Sydney.
- Young E and Doohan K. 1989. *Mobility for survival: A process analysis of Aboriginal population movement in Central Australia*. North Australia Research Unit Monograph, ANU Press, Darwin.

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