



## SERIES NOTE

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# **DEMOGRAPHY AS DESTINY: SCHOOLING, WORK AND ABORIGINAL POPULATION CHANGE AT WADEYE**

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## ABBREVIATIONS AND ACRONYMS

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ABC	Australian Broadcasting Corporation
ABS	Australian Bureau of Statistics
AHRC	Australian Human Rights Commission
ANU	The Australian National University
ASFR	age-specific fertility rate
CAEPR	Centre for Aboriginal Economic Policy Research
CDEP	Community Development Employment Program
COAG	Council of Australian Governments
CWSE	Certificate in Written and Spoken English
DEEWR	Department of Education, Employment and Workplace Relations
MSA	Mission Schools Agreement
NAPLAN	National Assessment Program—Literacy and Numeracy
NTCEO	Northern Territory Catholic Education Office
NTDET	Northern Territory Department of Education
OLSH	Our Lady of the Sacred Heart
OLSHTCS	Our Lady of the Sacred Heart Thamarrurr Catholic School
TDC	Thamarrurr Development Corporation
TFR	total fertility rate
TRC	Thamarrurr Regional Council
UNSW	University of New South Wales
VET	vocational education and training

## ABSTRACT

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Recent Commonwealth Treasury intergenerational reports have failed to consider the very different challenges that arise for the Indigenous population as a consequence of demographic ageing. Almost universally across the country, Indigenous populations are moving into a phase of demographic transition that will see the population in the prime workforce age groups peak relative to those of dependent age. This phase of so-called demographic dividend enables the maximising of income, savings and investments, at least potentially. Given current levels of Indigenous education, workforce participation and productivity the danger is that the opportunity for Indigenous families and communities to 'cash in' on this transitory structural position may be foregone, or at least less than optimised, for want of adequate human capital among key implicated cohorts. This paper explores these issues by establishing interactions between population change, educational outcomes and workforce participation among the Indigenous residents of Wadeye in the Northern Territory. It reveals structural connections between demographic and socioeconomic change and demonstrates that far from benefitting from demographic dividend, the Wadeye community is more at risk of prolonged dependency due to almost wholesale disengagement from schooling. The immediate challenge is twofold—to restore participation in compulsory schooling and to engage the substantial numbers who have already moved beyond school age with limited exposure to formal education in productive activity.

**Keywords:** Indigenous demography, schooling, employment, population change, Wadeye.

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## FOREWORD

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Staff at CAEPR undertake consultancy work for a variety of government, private sector and community organisations as a means of responding to demands for expert academic input to important areas of policy development. These activities often produce new data and insights into issues that are worthy of broader dissemination beyond commissioning agents

In 2009, the Commonwealth Department of Employment, Education and Workplace Relations (DEEWR) commissioned Dr Taylor to contribute to a strategic assessment of educational needs in the Tharrurr region focused on the school at Wadeye in the Northern Territory. The present paper is based on select findings from Dr Taylor's contribution to this exercise. It focuses on the interactions between population change and educational outcomes at Wadeye. As such, it both builds on and complements a significant body of earlier research conducted by Dr Taylor on social and economic conditions at Wadeye as an important component of the then COAG trial. This earlier work was published in 2004 and 2006 by the ANU E Press and in the CAEPR Working Paper series.

The current analysis is timely. Just recently, the federal Treasurer tabled the latest intergenerational report and reaffirmed the importance of demographic structure and population change for national policy planning, although little was said of the implications of demographic change for Indigenous populations. Dr Taylor's paper provides a detailed case study of just what these implications are likely to be. It demonstrates structural connections between demographic and socioeconomic change and shows how educational outcomes relate to these changes and place the Wadeye community at risk of prolonged dependency. Much needs to be done to create viable futures for remote communities and this analysis provides one important assessment, using the lenses of schooling and population change, of the scale of the task.

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March 2010

## INTRODUCTION

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As in any population, demographic change is an inevitable cause and effect of social and economic transformation among Indigenous Australians. While this much is axiomatic, the interactions and consequences involved are often lost in policy debate given the gradual, almost imperceptible, pace at which demographic processes unfold compared to the political imperative and immediacy of addressing community needs. However, the point is not entirely lost. For some time now researchers have revealed a need for Indigenous economic participation and productivity to keep pace with an expanding working-age population (Biddle, Taylor & Yap 2009; Gray & Tesfaghiorghis 1991; Taylor & Hunter 1998), while (some) policy-makers have recognised the potentially regressive link between these dynamics (Ah Kit 2004). It also seems that the point is now more widely appreciated since projections of the Indigenous population have become an essential part of social profiling and associated needs assessment at the various locations selected for enhanced government investment under the Council of Australian Governments (COAG) National Partnership Agreement for Remote Service Delivery.

It is noteworthy, then, that the three Commonwealth Treasury intergenerational reports that have been produced to date (Commonwealth of Australia 2002, 2007, 2010) and the Treasury discussion paper, *Australia's Demographic Challenges* (Commonwealth of Australia 2004), which all identify demographic change (specifically population ageing) as a national policy challenge, have overlooked the very different challenges that arise for Indigenous people as a consequence of demographic processes. As the Northern Territory Government response to the 2004 Treasury paper quite rightly pointed out (NT Treasury 2004) the Territory has two distinct populations with quite different characteristics, composition and growth trajectories—crucial here is the much younger, less migratory, higher fertility, higher mortality, higher growth, widely dispersed and permanently resident Indigenous population. The message was simple—while the nation as a whole might be increasingly focused on the means to finance and service retirees and the aged in general, Indigenous people (not just in the Territory) barely reach retirement age. Their concerns are more firmly fixed at the opposite end of the social policy spectrum to do with child development, housing for new family formation, education, training, youth, criminal justice, employment, and the means to securing asset accumulation and sustainable livelihoods. Such issues are noted in the most recent of the intergenerational reports (Commonwealth of Australia 2010), but only in the general context of closing the gap targets, not via any demographic rationale. In the move towards demographic convergence (Taylor 2003), ageing is a feature of the Indigenous population as well—it is just temporally lagged in its effect with consequently different policy implications.

One of these implications is quite substantial, certainly on a par with the national challenge of funding retirement whilst sustaining productivity, because it implies a need for behavioural and/or structural change on a societal scale (though at a different end of the age spectrum). Almost universally across the country, Indigenous populations are moving into a phase of demographic transition due to reduced fertility and increased survival that will see the population in the prime workforce age groups peak. As a consequence,

the ratio of age groups dependent on those of working age (for income) will be minimised. Assuming this ageing process will continue apace, the structural moment will eventually pass, obviously at different times in different places, but generally around 20 years from now (Biddle & Taylor 2009).

While the general contours of this demographic transition are reasonably well established (Biddle & Taylor 2009) what is lacking is a clear sense of the practical implications at varying scales. In one of the few examples at the national level, Jackson (2008: 225) has poignantly noted in regard to the non-Indigenous population that it became educated before it became 'old' and that the risk now for Indigenous Australians is that they will become 'old' before they are educated. The consequences of such a discrepancy are already felt in the relativities of economic participation and productivity that stimulate so much of the national policy agenda towards 'closing the gap'. The longer-term consequences are related to what demographers have coined 'the demographic dividend'—that period in demographic transition outlined above where the minimising of age-dependency ratios enables the maximising of income, savings and investments, at least potentially (Bloom & Williamson 1998). Given current levels of Indigenous education, workforce participation and productivity the danger is that the opportunity for Indigenous families and communities to 'cash in' on this transitory structural position may be foregone, or at least less than optimised, for want of adequate human capital among key implicated cohorts.

While this dynamic is easily grasped conceptually, we have little appreciation in a practical sense of how it is unfolding on the ground in individual communities and at scales that reflect the local impact of collective decisions regarding social change. This brings us to the present analysis, which is derived from a case study of the dynamic interaction between population change and economic outcomes in the Aboriginal town of Wadeye in the Northern Territory.

Although not specifically designed to consider issues of demographic dividend, a recent strategic assessment of educational needs focused on the town of Wadeye (Taylor & Dermody 2009) found it necessary to conduct this inquiry in light of an historic shift in demographic balance in the region that has come over time to substantially favour youth over adults. This was seen to parallel transformations in social organisation consequent first on sedentarisation and growing economic dependence on rations, then on cash as wages, and now on cash as welfare. With time, and with rapid population growth, this has accompanied a gradual erosion of traditional lines of authority and the development of new social formations manifest in a degree of anomie among significant sections of the population (Ivory 2008). In the Thamarrurr region this social transformation has been referred to as 'the rise of the child' (McCormack 2006: 10), a term that is less benign than it might sound as it brings with it particular issues and challenges for the achievement of education and economic outcomes against a background of weakened customary means of community control by elders (Desmarchelier 2000: 26–7).

Related to this demographic and social change, projections of the Aboriginal population at Wadeye and surrounds indicate that the now familiar process of ageing is also underway in that region and that the next 20 years open up the prospect of an economic dividend in the manner described above. Beyond this period, age dependency ratios are expected to rise again due to increased proportions of persons aged over

55 years. This is not to say that the working-age group will become insignificant, only that its proportional share will recede, possibly for all time, from a peak. Whatever the case, this predicted transition focuses attention on those cohorts that are moving into or through working-age and it raises questions about their preparedness to contribute and benefit economically.

In this assessment, formal schooling is seen as the key given its connection to human capital development. This is an important point because it is also the essence of a complaint to the Australian Human Rights Commission (AHRC) by members of the Thamarrurr community alleging breaches of the *Racial Discrimination Act 1975* and the *Disability Discrimination Act 1992* by the Northern Territory Government and the Commonwealth of Australia in relation to arrangements for education funding. At the time of writing this complaint was being investigated under the *Human Rights and Equal Opportunity Commission Act 1986* and was the subject of a conciliation process that included the parties mentioned above and Northern Territory Catholic Education Office (NTCEO). Stimulus for the complaint arose out of previous reportage of poor education and economic outcomes at Wadeye against an overall finding of government under-investment (Taylor 2004; Taylor & Stanley 2005). While the present study updates some of this earlier work by assessing change in select outcomes, its main purpose is to demonstrate ongoing structural connections between demography and economy and the fact that education outcomes to date place the community in danger of missing out on potential dividend on offer and at risk instead of sliding into perpetual dependency. To set the scene for this claim, it is worth reflecting on significant steps in the provision of schooling at Wadeye.

## INSTITUTIONAL HISTORY

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The modern institutional history of the Thamarrurr region commenced in 1935 with the arrival of missionaries at the Murrinpatha estate of Werntek Nganaiyi. The subsequent unfolding of events relevant to the current analysis has been well documented by Nganbe and McCormack (2009). In effect, the past 70 years have seen the bringing together, both socially and economically, of several language groups and numerous patrilineal clan groups who retain physical and spiritual ties with estates across the region. While Port Keats thus became the residential focus for a polyglot population, these groups were nonetheless socially connected via a tripartite structure made up of the Tharnpa, Wangga, and Lirrga ceremonial groups. This structure remains foundational in determining social relationships and interactions across the region that is connected to Wadeye (Ivory 2008; Nganbe & McCormack 2009). Over the course of just 70 years, this spatially dispersed alliance has come to focus on a densely settled town of up to 2,500 people.

According to the anthropologist Stanner, who accompanied the original missionary party, the area between the Daly and Fitzmaurice Rivers was one of the least known parts of the continent up to the time of their arrival (Stanner 1933: 381). In 1939, in order to secure a reliable water supply, the mission site was relocated 10 miles inland to Wadeye Creek on Diminin country and what then became known as Port Keats. For the next 30 years the residents of Port Keats, and those from surrounding country who came under the

influence of the mission, were effectively wards of the state under the supervision of respective mission superintendents, and therefore subject to their theology and policy.

Under this arrangement, formal education commenced with the arrival of three Sisters of Our Lady of the Sacred Heart (OLSH) in 1941, who taught basic literacy and numeracy to girls who had assumed residence at the convent. While the war years were disruptive, in 1947 school dormitories were constructed from war-surplus materials to separately accommodate boys and girls, with 65 students aged 5–17 attending school. This number is significant given that the mission population of the day was barely 300. Children were separated from their families to ensure a focus on western education and a deliberate devaluing of traditional culture. This dormitory system of schooling persisted through to the late 1960s until a new open school was established at the current site. In effect, then, the generation alive today that was born before the 1960s, and that now forms the middle and senior leadership in the region, were educated in this closed environment, often away from family and under the close supervision of mission staff. This inevitably instilled a particular set of world views and educational outcomes that remain apparent today, certainly when compared with those of subsequent, and especially most recent, generations.

The contemporary school commenced at a time when Catholic influence in the community reached its zenith. Ironically, though, at the same time mission control over people's lives was winding down due to a shift in policy away from assimilation towards self-determination. As if to symbolise this transfer, the school acquired its first lay principal in 1975 and the proportion of religious-to-lay staff fell from 50 per cent in 1972 to just 13 per cent by 1980. By now the Port Keats settlement was expanding rapidly with the return of families from life on cattle stations south of the Fitzmaurice River following the award wages decision, and by natural increase. Anticipating this more widely across the nation, Stanner observed in his 1968 Boyer lecture that:

the composition of their population is ... undergoing a startling change: it is now, in at least some groups, very much more youthful, and growing in size at a very much faster rate, than ours. It follows that their conditions will have to improve faster than ours if they are to stay even at their present relative disadvantage (Stanner 1969: 58).

For Wadey, this observation proved remarkably prescient.

Significant developments in the era of self-determination came quickly. Alongside increasing reliance on cash from work came social security payments and the prospect of access to cash without work. Against this was a background of limited economic opportunity to absorb growing numbers. In this environment, mission control of the growing settlement was relinquished to the locally-formed Kardu Numida Council in 1978 at the same time as the Northern Territory was acquiring self-government. The relevant fact about this latter development for the present discussion was the signing of the Mission Schools Agreement (MSA) between the Commonwealth and Northern Territory Governments in 1979. Under this agreement, the Commonwealth agreed to hand over responsibility for support of the OLSH School at Wadey to the Northern Territory Government on the proviso that, 'the Commonwealth would expect this to be at no

less a level than that previously provided by the Commonwealth which has been on the same basis as for government schools' (C. Graham, 'The Big Read: Class Action', *National Indigenous Times*, 3 May 2007). In other words, control of the school was being handed to the Territory on the condition that it continue to provide funding at the same level as all other government schools. The present complaint to the AHRC by members of the Thamarrurr community alleges breach of this condition with implications for education outcomes. Whether such a link can be demonstrated is not the issue here, but it does provide a relevant institutional time frame for examining trends in school participation.

In 1994, the Kardu Numida Council collapsed due to a combination of inappropriate governance arrangements and financial crises brought about partly by its inability to service a rapidly growing population (Desmarchelier 2001: 41). However, determined to re-establish control, clan leaders sought to establish a new governance structure that could provide for legal representation of government functions as required by the contemporary world, while reasserting and enabling customary residential rights and responsibilities throughout the region. This was found in a culturally-based model for resolution and power balance referred to in Murrinhpatha as 'Thamarrurr' (Desmarchelier 2000). This became the basis for the creation of the Thamarrurr Regional Council (TRC) in 2003 under the Northern Territory Local Government Act which lobbied government for improvements in education and housing in particular, under the arrangements established by the COAG Indigenous Communities Coordination Pilot trial, which ran from 2003–06 (Gray 2006). While this local governance arrangement was to last only until June 2008, being replaced by the Victoria-Daly Shire, its legacy is seen in the Thamarrurr Development Corporation (TDC) and in Thamarrurr Incorporated (hereafter, Thamarrurr)—both entities that retain clan-based governance structures.

It could be argued that a further legacy of the TRC was the change in status of the renamed Our Lady of the Sacred Heart Thamarrurr Catholic School (OLSHTCS) from that of a 'mission school' within the Northern Territory education system to that of a 'catholic systemic school' in 2007, enabling direct access to Commonwealth funding for the first time. In effect, though, this process commenced in April 2005 when the then Prime Minister and Northern Territory Chief Minister agreed to revisit the 1979 MSA and, as an interim measure from 1 January 2006, treated OLSHTCS as a government school for the purpose of allocating mainstream Australian government funding programs. As a consequence, it became entitled to, and swiftly received, substantially higher funding than it did when it was resourced pursuant to the MSA. In 2003, recurrent spending at the school was just below \$2 million and capital grants were nil. By 2008, recurrent grants (including from new program funding) were almost \$10 million, and up to \$15 million in capital expenditure was either completed or in progress. Significantly, this included the first stage of a new secondary campus, which was officially opened in November 2007.

This turnaround in resourcing is increasingly played out against a background of heightened policy activity in the Northern Territory, stimulated by the Northern Territory Emergency Response and various COAG and Northern Territory Government Indigenous reform processes aimed at closing the gaps in education and related socioeconomic indicators. One consequence is that Wadeye is now nominated as a 'growth town' under the COAG National Partnership for Remote Service Delivery strategy and the Northern Territory

Government's Working Future policy. These policies and the AHRC conciliation process are likely to have significant fiscal and program implications for the Thamarrurr regional population and the continuing shift in education spending is no doubt part of this wider strategy. While this is all well and good, as with any public investment, adequacy and effectiveness can only be assessed against some measure of need and its composition.

## EDUCATION FOR WHAT?

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Before proceeding to consider the scale and composition of this need it is worth reflecting on reasons for the current level of interest in the delivery of education services at Wadeye. Why, in the minds of government, community leaders, parents and children at Wadeye is schooling necessary? What is its purpose? What does, or should, it lead to?

From the state's perspective, the answer is unequivocal—education is seen as a means to providing citizens with foundational skills necessary to function in Australian society, an important part of which involves a pathway into employment. To paraphrase the COAG Productivity Working Group, it provides the means to acquisition of knowledge and skills to enable the effective participation of individuals in society and their employment in a globalised economy. Beyond schooling, the aim is to provide all working-aged Australians with the opportunity to develop skills and qualifications needed to enable them to be effective participants in, and contributors to, the modern labour market. To achieve this, individuals are to be assisted to overcome barriers in education, training and employment and to be motivated to acquire and utilise new skills. In support of these state-sponsored aims the various education acts of States and Territories have long legally required parents to enrol their children of compulsory school age and to ensure their regular attendance at school throughout each school term.

From the perspective of parents and children in the Thamarrurr region, it would seem that these questions regarding the purpose of schooling have never been systematically asked or rigorously considered. However, to the extent that recognised Thamarrurr leaders represent such views, the aims of education as articulated by government would appear to be not incompatible. For example, the key objective of the Thamarrurr COAG trial between 2003 and 2007, as articulated by the elected TRC, was the slogan 'Give Every Kid a Chance'. One understanding of this phrase within the council that was manifest in the establishment of the COAG trial working groups on education, youth and families, was the stated aspiration that Wadeye kids should have as good access to education as any other kids in Australia as essential preparation for eventual participation in paid employment and achievement of control over their own destiny. This aspiration was most recently spelt out by the now local chair of the OLSHTCS Board at the opening of the first stage of the new secondary facility:

... we seek to provide our young people with the best western education in this day and age ... to have the services provided for education that our people deserve ... to develop personality, talents

and abilities to the fullest possible extent. (To) improve employment prospects and prospects for advancement in Australian society. This includes the needs of disabled children. Education is the key that opens the doors of opportunity ... (our) vision is to produce strongly educated young men and women to become leaders in their community ... to look people straight in the eye and say what clan they are from, to make the right decisions as leaders of their own people. To understand and appreciate how the wider community operates and how to live in this great land called Australia. I want to see them after they have worked hard and saved their money ... a time to say these youth can and must learn, a time where they must be pushed forward to their full potential, a time where our community must come together and take full responsibility and control of our children's education. Give our youth the opportunity to see the world beyond what they live in today. Through this education we want to open their minds and give them the knowledge to explore life outside Wadeye and the Thamarrurr region (Nganbe 2007).

While there would therefore seem to be some unity of purpose and aspiration in regard to education at Wadeye, even a cursory perusal of participation and performance data indicate that schooling and its intended outcomes have been, and remain far from optimal. As a consequence, the chances of reaping the dividend from demographic change are structurally compromised without immediate and substantial redress. To begin to understand why this is so and to consider what needs to exist as a consequence, it is necessary to establish key markers of demography, schooling and labour force status.

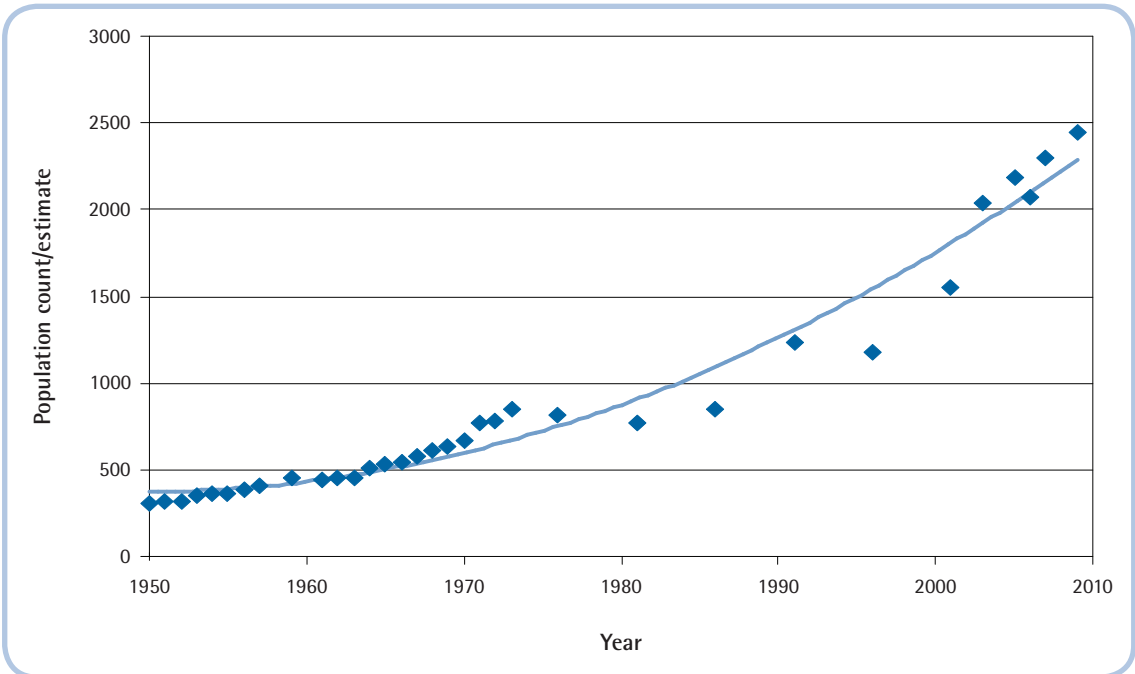
## DEMOGRAPHIC CONTEXT

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The population history of Wadeye and surrounds has been relatively well documented from the beginnings of the mission to the present day (Taylor 2008). With the bedding down of civil administration under mission rule after World War 2, regular annual counting (at least of those 'in contact' with the mission) became a requirement, initially to the Native Affairs Branch and then (from 1953) to the Welfare Branch of the Northern Territory Administration. This distinction between Aboriginal people 'in contact' and those who were 'nomadic' is interesting as it has complicated the compilation of accurate regional statistics to the present day. In the mission days people were highly mobile, moving frequently between mission and bush because of the rotational system of community residence imposed by the mission which saw a turnover of coastal and inland groups (though not Kardu Diminin) on a regular basis. Thus, from the outset, the precise size and composition of a 'mission' as opposed to a 'regional' population has been somewhat blurred. This difficulty persists for much the same reasons as in the past—frequent mobility, and intermittent outstation and town residence.

Such nuance aside, the historical record indicates a steady rise in the Wadeye population throughout the mission years up to the time of handover to the Kardu Numida Council in the 1970s. Subsequently, Australian Bureau of Statistics (ABS) census counts have recorded variable growth, and even periods of decline, but in recent years a series of community-instituted counts and various official estimates have

**Fig. 1. Counts and estimates of the Aboriginal population of Port Keats Mission/Wadeye/Thamarrurr 1950–2009**



Source: Taylor (2008) and author's fieldwork, 2009.

revealed a rising population at a level consistent with an extrapolation of the trend evident at the end of the mission years. This population history is summarised in Fig. 1.

Today, the Thamarrurr region population is constituted of some 40 extended families and 20 locally defined clan groupings (Taylor 2004). Whilst members of all of these social units are present in the town of Wadeye, country and family affiliations beyond the town produce a population that is widely and variously scattered at any one time, at local outstations and in neighbouring communities and towns across an area from as far south as Kununurra and Timber Creek through the Daly region and north to the Cox Peninsula, Darwin and the Tiwi Islands. This is especially so in the dry season, but within this network there is considerable short-term mobility at all times for a host of reasons, including travel to work, school, meetings, ceremony, funerals, shopping, banking, socialising and holidays. There is no doubt that such mobility impacts on school enrolment and attendance at OLSHTCS as children move to and fro, either independently or with parents and guardians, depending on their age. What is less clear, for want of adequate tracking of enrolments in other locations, is whether it ultimately affects their overall exposure to schooling. It seems likely that it does.

## RURAL LIVING

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By far the majority of people in the Thamarrurr region live in the town of Wadeye, but there are some 20 other localities where families reside either permanently or occasionally on traditional lands and as a consequence live for long periods at some distance from Wadeye. As noted in the formal Wadeye COAG trial evaluation (Gray 2006: 13), the leadership in the Thamarrurr region has sought to promote the notion that the residence of people in these localities on clan country should be seen not as an 'outstation movement' but simply as a desire to reside on rural sub-divisions away from the service hub in much the same way as has occurred across a much wider area surrounding Darwin/Palmerston and other Northern Territory towns that are fully serviced by roads and other infrastructure. This idea of Wadeye (Port Keats) as a service hub to support people on their country is a long-standing perception and understanding of clan groups that dates from the original vision for the mission and its region.

In addition to those usually resident in the region, there are others (often related kin) from localities adjacent to, and well beyond, the Thamarrurr boundary who frequently visit and reside in the region. Reciprocal visits are often made in the opposite direction. Aboriginal people of the Thamarrurr region have social links that extend over a large area at least as far north as Belyuen, Darwin and the Tiwi Islands; east to Palumpa, Peppimenarti and Daly River; and south to Timber Creek, Kununurra and Wyndham. However, the bulk of short-term circular movement occurs within the Thamarrurr region between Wadeye and surrounding rural localities located on clan countries (this includes the sub-divisions of Nilinh and Manthathpe next to Wadeye). While most of the usual resident population resides continually in Wadeye, daily interaction with these rural settlements is common and this blurs the boundary between town and country to the point where they become one and the same thing. Part of the reason here is a necessity to move in and out of Wadeye for schooling. As far as rural education services go, these are limited to the provision of a teacher from OLSHTCS on a daily commute from Wadeye (subject to road conditions) for 12 students at Kuy, and a newly constructed Northern Territory Government preschool at Nama to be serviced out of Nganmarriyanga (Palumpa) school. It is worth noting that preschools had previously existed at Namarluk, Merrepen and Perrederr.

The population resident at rural locations averages around 200 but numbers peak above this in the dry season and can be much reduced in the wet season when many people move in to Wadeye. Most of this seasonal shift is related to the poor condition of roads in the region as this severely restricts access to essential town-based services during the wet season. Despite the current policy focus on developing urban hubs, decentralisation has continued apace in the Thamarrurr region with new housing constructed in recent years at Nilinh, Manthathpe and Wudapuli/Nama (there are now 7 houses at Nilinh, 13 at Manthathpe, 16 at Wudapuli and 13 at Nama). With the prospect of more housing at some of these locations, continuous residence in rural locations is becoming more commonplace. People assert their right and preference to live in such places, with implications for the adequate provision of education services (Socom & DodsonLane 2009). This raises questions around the practical interpretation of the 'Statement of Expectation of Service

Delivery' that is to be developed for such locations as part of the Northern Territory Government's Working Future policy.

Aside from consequences for schooling, this network configuration of residence raises issues around the proper counting and estimation of the regional population. It also calls for some care in establishing measures of education participation since OLSHTCS is not the only education provider for the Thamarrurr population. This issue of appropriate demography first exercised the TRC in 2003 and they addressed it by compiling their own regional database of usual residents (Taylor 2004). This was subsequently updated in 2005, 2007 and 2009 under the auspices of Thamarrurr, a process that involved senior women and men in the community working variously with the school, the clinic, the TDC and the Catholic parish in accounting for subsequent births, deaths and migration. As indicated in Fig. 1, this process yielded a current (2009) resident Aboriginal population of the Thamarrurr region of almost 2,500. Interestingly, this is in line with projections made in 2003 that indicated a population of 3,833 by 2023, a projected scale of growth that contributed to the case for the construction of a new secondary facility at Wadeye (Taylor 2004). Of course, population dynamics vary over time and so new 20-year projections are now developed based on the latest available demographic parameters.

## AGE COMPOSITION

Accompanying the more or less steady growth in population size since the mission was founded, there has been a significant shift in age structure. Starting with data on age distribution gathered by Stanner in 1935, it is possible to discern a gradual shift from an initial deficit of children and youth to adults, to one where this ratio has reversed and where there are now substantially more children and youth compared to adults (Taylor 2007). Thus, in 1935, the child (under 18 years) to adult ratio was 0.55; in 1952 it was 0.87; by 1956 there was parity at 100.5; by 1964 there were clearly more children than adults at 108.0; and currently this is emphatically the case at 114.1. What this reflects is an early improvement in child survival, a persistence throughout the mission years and beyond of high fertility, and continuing high adult mortality (especially among males). These effects are consistent with the growing sedentarisation of the regional population around the mission site and subsequent town of Wadeye, and the increased access to housing, health services, education, employment and income that this has provided. As noted earlier, this has been referred to sociologically as 'the rise of the child' (McCormack 2006: 10; Nganbe & McCormack 2009).

Presently, just over half of the Thamarrurr population is less than 18 years of age with a more or less even balance between males and females. Combined with the overall size of the regional population at around 2,500 and a high degree of regional residential concentration at Wadeye, this youthful age profile presents a very different demographic structure to that prevailing when today's oldest Thamarrurr residents were growing up and it raises significant questions regarding authority structures and leadership succession (Ivory 2008). As it has built up, this profile has brought with it such a weight of population momentum as to, at times, overwhelm community institutions. This was first signaled in the mid-1990s with the demise of

**Table 1. Estimated size of population cohorts eligible for schooling at Wadeye under the MSA, 1979–2007**

Birth cohort	Age now	Males	Females	Total
2000–01	8–9 <sup>a</sup>	74	69	143
1995–99	10–14	134	139	273
1990–94	15–19	137	160	297
1985–89	20–24	117	130	247
1980–84	25–29	111	117	228
1973–79	30–35 <sup>a</sup>	95	85	180
<b>Total</b>	<b>8–35<sup>a</sup></b>	<b>668</b>	<b>700</b>	<b>1368</b>

Note: a. Based on estimates of single year.  
Source: Author's own calculations.

the Kardu Numida Council (Desmarchelier 2001: 41), and it is manifest now in what is a very large number of children, youth and young adults who, as we shall see, have effectively been disengaged from regular schooling. The scale and composition of this exclusion is considered in more detail later. Here we establish the size of relevant cohorts.

Table 1 shows the number of males and females according to birth cohorts that extend back to the initial years of the current school in the 1970s. It covers the period during which the MSA was in place. Thus, today's 8- and 9-year-olds who were born in 2000 and 2001 achieved compulsory school age in the last years of the MSA. Those born in the latter 1990s had most of their schooling under the MSA while those born in the early 1990s (today's 15- to 19-year-olds) were the last full cohort to complete schooling in this way. All earlier cohorts, of course, through to the early 1970s and the transfer from mission control, were subject to no other institutional arrangement. Thus, at the outside, the population alive today that can be said to have been educated under the MSA numbers more than 1,300. However, if we adjust for partial involvement, and on this basis exclude those born since 1995, then this number becomes 952.

For the present exercise, the significance of these age data is best revealed by grouping them into age ranges that form the focus of policy interest. From the perspective of addressing current educational needs, the COAG focus on securing universal preschool access and proposals for extending compulsory schooling through to age 17 under 'learn or earn' programs, suggests a number of relevant groups. First of all are those of infant age (0–3), followed by those in preschool and transition years (4–5). Presently, compulsory school age in the Northern Territory is 6–15 years inclusive, although there are proposals to raise this to 17 years. At the same time, a number of individuals enrolled at OLSHTCS are 18 years or even older. Those presently alive whose available schooling was provided solely under the terms of the MSA refers to the

**Table 2. Size of policy-relevant age groups in the Thamarrurr region, 2009**

Policy/age group	Population	Percentage of total population
Infant (0–3)	312	12.6
Preschool (4–5)	147	5.9
Compulsory school (6–15)	617	25.0
Broad school age (4–17)	890	36.0
Young adult (18–24)	362	14.6
Young adult (25–34)	374	15.1
Middle adult (35–54)	375	15.2
Old adult (>55)	126	5.1

Source: Author's fieldwork.

current population aged between 16 and 34 years. Finally, the majority of individuals over 35 years would have experienced at least some, and for the most part entirely, dormitory mission schooling and this forms the final age group of interest. The size of each of these age groups is shown in Table 2.

If we consider the infant age group first, these individuals will enter the school system in the immediate future. In the absence of a household census a synthetic cohort of infants was created using information from the baptismal register of Wadeye children for the period 2003–07 made available by the local Catholic parish. This source indicates an annual average of 79 baptisms of local Indigenous children which is slightly higher than an annual average of 69 births for the period 2003–07 obtained from records at the Wadeye Community Health Centre as part of a study on community-based birthing (Ireland 2009: 66). When used in combination with previous updates of the Thamarrurr population database this suggests an infant (0–3 years) population in 2009 of 307, a figure that is consistent with the equivalent community cohort count of 285 in 2003. It is interesting to note that average registered births over the same period (2003–07) provided by the ABS would suggest a lower population of around 256. However, given that not all children at Wadeye are baptised and that baptism is often long-delayed, there is every likelihood that the synthetic estimate itself is too low. This uncertainty surrounding Indigenous births is consistent with the experience generally in Northern Territory administrative data systems (Johnstone 2010).

More certainty surrounds the size of subsequent age groups starting with those aged 4 and 5 in preschool and transition years who number 147. Perhaps the more pertinent group in terms of state and parental obligations with respect to schooling are those in the present compulsory age range of 6–15 years. This is a sizeable group numbering 617. As mentioned, some of those enrolled at OLSHTCS are older than this and there is a growing focus on early childhood education so a wider age range from 4–17 years inclusive is provided—this totals 890. Nonetheless, from a labour market perspective, the relevant base age remains

15 years, but here a distinction is drawn between those aged under 35 and those who are older. This reflects the earlier contextual discussion regarding the significance of exposure to different education and institutional regimes. As noted, the size of the group that has emerged from fully MSA schooling is substantial at 871 and it represents the largest single social block in the region today. The older fully mission-educated group totals 486, obviously with numbers substantially diminished with age.

In any discussion or assessment of needs at Wadeye, these various cohorts provide the base quantum against which to determine estimates net of any sub-cohort characteristics (such as special needs students) that might imply particular requirements. A basic argument and empirical finding is that these cohorts display archetypal characteristics and that for planning purposes the implications of cohort progression should be considered. The most pressing example of this is to contemplate overall community outcomes in 20 years time, when those currently aged 35 years and over become a much smaller group aged 55 years and over, and are replaced by the large block currently aged 15–34 who will become the future middle management and parental group aged 35–54. What educational and training needs for succession does this shift imply?

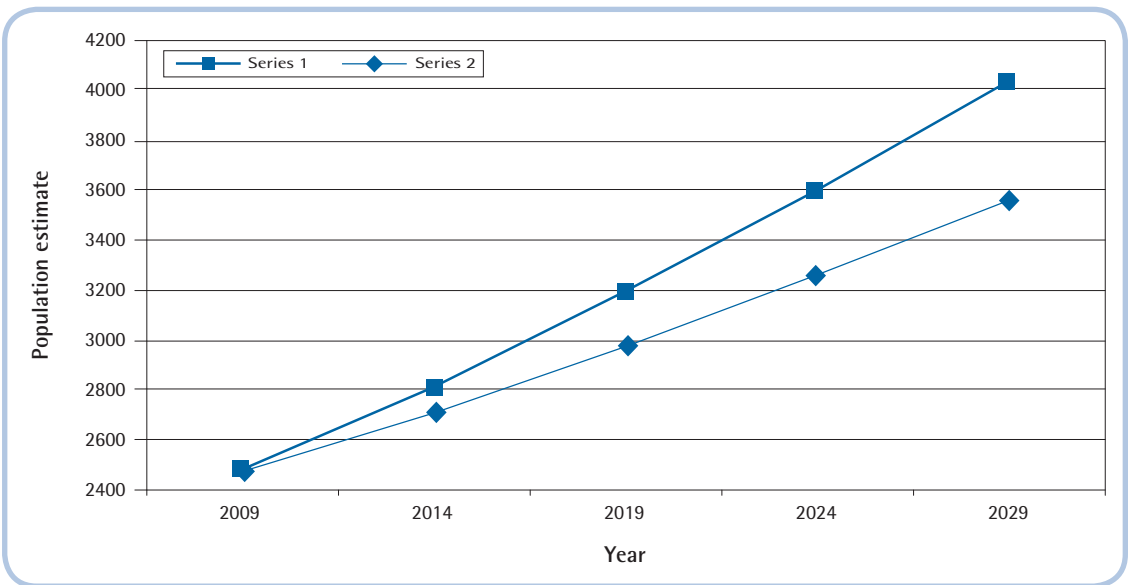
## THE NEXT 20 YEARS

One of the difficulties encountered in addressing needs in Indigenous affairs is that they have often changed by the time a measure of need is established and necessary resources are deployed. To overcome the constant sense of catch-up that this creates one device has been to develop projections of the population over some specified future period so that the scale of likely future needs for different cohorts in the population is known in advance and may be planned for. To do this for the Thamarrurr population a standard cohort-component methodology is applied over a 20-year period to 2029, roughly a generation from now. This carries forward the 2009 population to 2029 by successive five-year periods. Two projection series are created, based on ageing the population by five-year groups and subjecting each of these to age- and sex-specific mortality, fertility and net migration regimes as follows:

Series 1 projection assumptions:

- Survival rates from the 2006 Indigenous life tables for the Northern Territory (ABS 2009a) are applied and held constant for the projection period.
- ASFRs are derived from parish baptismal records that refer to local children baptised during the period 2003–07 inclusive and held constant. This produces a TFR of 3.4.
- In the absence of an operational model of migration, and in light of very low net and gross inter-regional movement reported for the Thamarrurr region in the 2006 Census (–29 per '000, and +60 per '000 respectively), net migration is held at zero for all ages.

**Fig. 2. Indigenous population projections in the Thamarrurr region, 2009–29**



Source: Author's own calculations.

#### Series 2 projection assumptions:

- Survival rates from the 2006 Indigenous life tables for the Northern Territory (ABS 2009a) are applied and held constant for the projection period.
- Age-specific fertility rates (ASFRs) are derived from ABS-registered births to Indigenous mothers with a usual residence address in the Thamarrurr region over the period 2003–07 and held constant. This produces a total fertility rate (TFR) of 2.6, which is similar to the TFR of 2.4 recorded for Indigenous mothers generally in the Northern Territory for the same period (ABS 2007).
- In the absence of an operational model of migration, and in light of very low net and gross inter-regional movement reported for the Thamarrurr region in the 2006 Census (–29 per '000, and +60 per '000 respectively), net migration is held at zero for all ages.

The key differential, then, is higher fertility in the Series 1 projection. In effect, the Series 2 projection produces an outcome over 20 years similar to a situation where the Series 1 ASFRs are allowed to decline by 1 per cent per annum over the projection period. Thus, the Series 2 projection provides a proxy model of a decline in fertility that might be expected to occur if female participation in schooling, training and work were to increase substantially. This proposition is only speculative and it is based on a negative relationship

that has been observed between Aboriginal fertility and such modernisation factors more generally (Gray 1990). However no research has been conducted at Wadeye in regard to what factors might influence fertility levels and so the Series 1 scenario remains purely heuristic.

## POPULATION SIZE

The projections are conducted separately for males and females in five-year groups over 2009–29. Projected births for the period 2009–13 are added to the existing 2009 population, and each cohort is then subjected to respective survival rates to arrive at an estimate of the population in each age group in 2013. This process is continued through to 2029. As shown in Fig. 2, the Series 1 projection indicates a population of 4,032 by 2029, while the Series 2 projection points to a lower figure of 3,555.

Overall, by 2029, the Series 1 projection indicates a population growth of 63 per cent (or 2.5% per annum), representing an increase of 1,560 persons. If we add to this a ratio-based estimate of a possible future non-Aboriginal population of 266 (from the 2006 estimated resident population and assuming a constant non-Indigenous share), then this produces a combined total usual resident population for the region of 4,298 by 2029. Thus, within a generation, Wadeye and its associated rural living areas could have a population that is almost equivalent to present day Nhulunbuy (4,559), and be much greater than present-day Tennant Creek (3,330). Unlike the many declining country towns in the rural hinterlands of Queensland, Western Australia, New South Wales, Victoria and South Australia, Wadeye is expanding in size. Consequently, unless the upgrading of infrastructure and services that has begun to take place matches this population growth, then Wadeye will remain anomalous in the Australian settlement hierarchy as a growing town lacking in basic facilities. To be fair, precisely what infrastructure and services might normally be expected for a town of this projected size remains unclear. It is hoped that more clarity on this matter will arise in due course from the Remote Service Delivery strategy being developed by COAG.

## CHANGE IN AGE DISTRIBUTION

Underlying the overall growth in population size is a significant shift in age distribution. Of interest here is the impact on future school-age and working-age populations. Also of interest is the size of the cohort shift that is underway amongst those who are now at school and will soon be entering workforce age, and amongst those who are now beyond school age and who should already be entering the workforce. To begin this discussion, numeric and percentage change by five-year age group based on the Series 1 projection is shown in Table 3.

**Table 3. Series 1 projection of the Aboriginal population of the Thamarrurr region by five-year age group, 2009–29**

Age group	2009	2029	Net change	Per cent change
0–4	384	563	179	46.7
5–9	382	515	133	34.9
10–14	269	465	196	72.8
15–19	308	414	106	34.6
20–24	253	376	123	48.4
25–29	232	369	137	59.0
30–34	158	256	98	62.0
35–39	132	283	151	114.1
40–44	93	225	132	141.8
45–49	82	194	112	137.1
50–54	68	124	56	82.2
55–59	41	97	56	136.8
60–64	21	61	40	188.9
65–69	21	48	27	127.4
70–74	12	30	18	154.0
75+	16	12	–4	–27.1
<b>Total</b>	<b>2,472</b>	<b>4,032</b>	<b>1,560</b>	<b>63.1</b>

Source: Author's own calculations.

Table 3 shows the demographic impact of those currently aged 15–34 as they age over the next 20 years, and it points to high rates of growth in the older working-age group of 35–54. Beyond that, today's older workforce will increase the ranks of the aged population with big proportional increases, although overall numbers remain relatively low. Thus, tomorrow's workforce will need to be drawn heavily from the cohort that was eligible for schooling between 1979 and 2007, as well as from those who are currently eligible for school.

By contrast, because it reflects lower fertility, the Series 2 projection impacts only on the base of the age distribution where much lower growth in future infant and school-age numbers is observed (Table 4). The consequences for preschool and primary school planning are significant because they imply little addition to current intake. Impacts on secondary school ages are higher, but still much below the scenario painted by the higher fertility Series 1 projection.

**Table 4. Series 2 projection of the Aboriginal population of the Thamarrurr region by five-year age group, 2009–29**

Age group	2009	2029	Net change	Per cent change
0–4	384	418	34	8.9
5–9	382	393	11	2.9
10–14	269	354	85	31.6
15–19	308	316	8	2.6
20–24	253	376	123	48.6
25–29	232	369	137	59.1
30–34	158	256	98	62.0
35–39	132	283	151	114.4
40–44	93	225	132	141.9
45–49	82	194	112	136.6
50–54	68	124	56	82.4
55–59	41	97	56	136.6
60–64	21	61	40	190.5
65–69	21	48	27	128.6
70–74	12	30	18	150.0
75+	16	12	–4	–25.0
<b>Total</b>	<b>2,472</b>	<b>3,555</b>	<b>1,083</b>	<b>43.8</b>

Source: Author's own calculations.

## DEMOGRAPHIC DIVIDEND?

The key point to note from both of these projections is that the next 20 years will present a unique period in the demographic history of the Thamarrurr region. Basically, under both series, it appears that the population of prime working age (where employment, income-earning, savings potential and general economic participation are potentially maximised) will peak relative to the dependent population (younger and older), than at any other time in recent decades and, possibly, ever again into the foreseeable future. Presently, 54 per cent of the regional population is aged 15–54. Using the Series 1 projection, this becomes 60 per cent in 2029 before receding again, and in the Series 2 projection it becomes 56 per cent. Australia as a whole has already passed through this transition and benefited substantially in terms of productivity in the process since the population was generally educated and in the labour force before it became old. Likewise, prospects for a productivity dividend in the Thamarrurr region will depend on the education and workforce experience of cohorts that are implicated. Table 5 shows the size of these cohorts in 20 years time. Thus, 376 of today's infants will be 20–24 years old in 2029, and today's 369 5–9 year olds will

**Table 5. Series 1 projection of the Aboriginal population of the Thamarrurr region by five-year age group, 2009–29**

		Age in 20 years time →							
		20–24	25–29	30–34	35–39	40–44	45–49	50–54	20–54
Age now	0–4	376							
	5–9		369						
	10–14			256					
	15–19				283				
	20–24					225			
	25–29						194		
	30–34							124	
	0–34								1,827

Source: Author's own calculations.

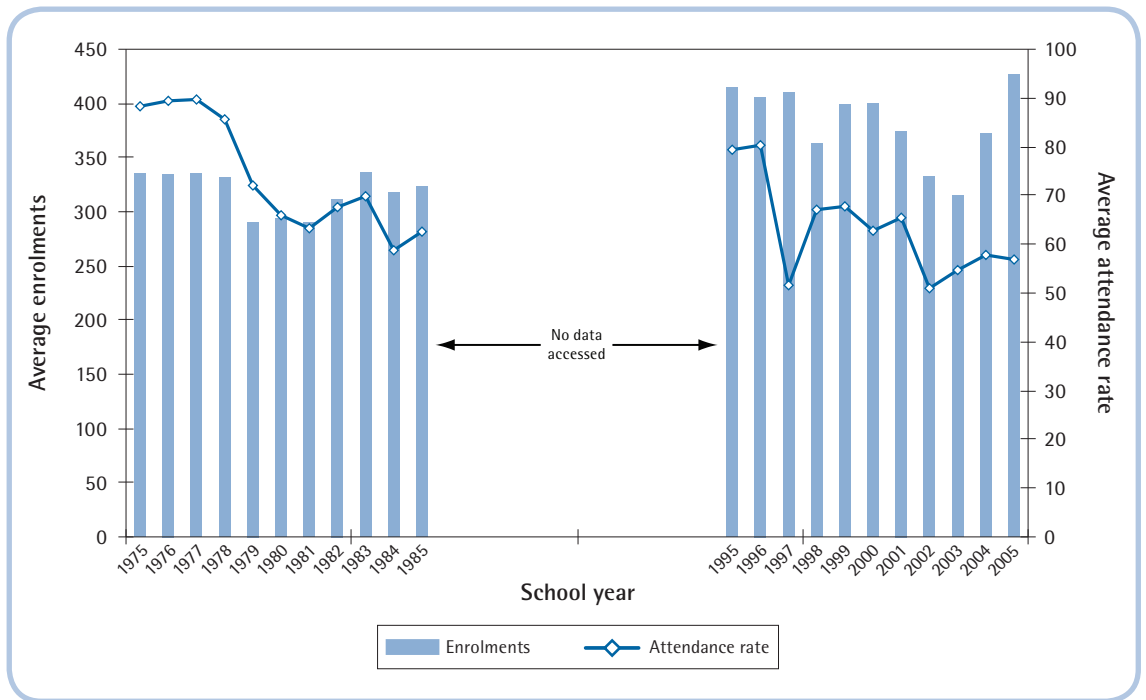
be 25–29 years old in 2029. If these future entrants to the working-age group are to contribute to the demographic dividend then it will be necessary to provide a program of full education and transition into training and employment for almost 800 children who are presently up to 10 years of age. Other cohorts in the matrix have different requirements.

With regard to those who have left school already, the younger ones of these (now aged 15–24) will comprise a block of just over 500 persons who will be aged 35–44 in 20 years time and who will need to assume positions of employment in much greater numbers if today's productivity level is to be maintained. Much the same goes for the 318 now aged 25–34 years who will have the added burden of assuming community leadership roles and responsibilities. All up, the social program to ensure achievement and optimal return from demographic transition refers to a population that is just short of 2,000. This figure provides the basic multiplier for any assessment of the scale of developmental requirements. The first component of this group are those involved in schooling.

## SCHOOLING: ENROLMENT AND ATTENDANCE

As indicated above, in 2009 the population of compulsory school age (6–15 years) numbered 617 (or 25%) of the total population. Those in broad school-age range (incorporating preschool and an extended 2 years of high school, i.e. ages 4–17) numbered 890, or 36 per cent of the total population. A primary indicator of educational performance in respect of these groups is the degree to which parents enrol their children in

**Fig. 3. Annual average enrolments and attendance rates for OLSHTCS school years 1975–85 and 1995–2005**



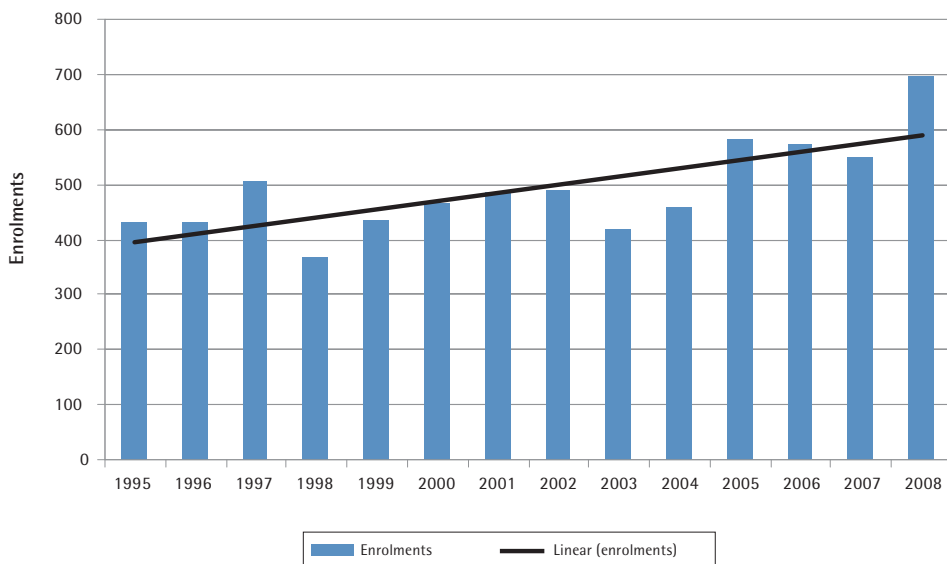
Source: Administrative data (1975 & 1985) from G. McCormack (pers. comm.) and administrative data (1995 & 2005) from NTCEO, Darwin.

school and the extent to which daily attendance in class is sustained throughout the school year. As we shall see, on both of these counts, the situation at OLSHTCS raises significant issues of concern.

Reporting requirements in the Northern Territory education system involve the collection of enrolment and attendance data at eight points across the school year. Enrolment numbers represent the number of students on the roll on the day of collection, while attendance numbers represent an average of students attending over the previous 4-week period. The NTCEO retains comprehensive records for each school in its jurisdiction and these have been accessed for OLSHTCS to provide a sense of the trajectory of school participation in Thamarrurr in recent years, as well as a detailed assessment of the current situation.

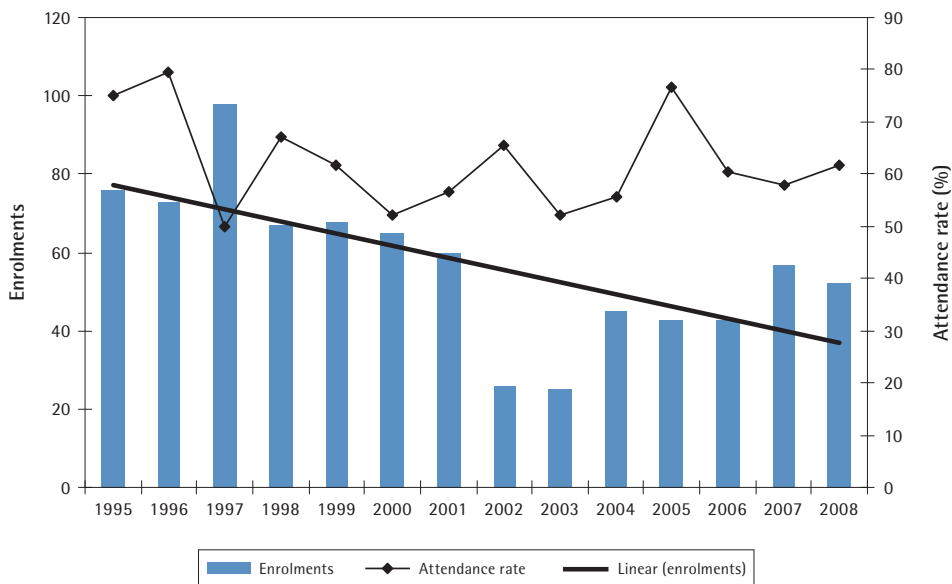
These data have been collected systematically since the 1970s and access to records from this and subsequent decades provides a valuable 30-year trend analysis, as shown in Fig. 3, which indicates the annual average number of enrolments and the annual average attendance rates for the periods 1975–85 and 1995–2005. In the first of these decades, average enrolments showed an overall downward trend, while attendance rates clearly declined. Lack of access to data prevents comment on the next decade, but by the

**Fig. 4. Enrolments at OLSHTCS, 1995–2008**



Source: Administrative data from NTCEO, Darwin.

**Fig. 5. Preschool enrolments and attendance rates, OLSHTCS, 1995–2008**



Source: Administrative data from NTCEO, Darwin.

mid-1990s it is clear that enrolments and attendance had increased, only to fall substantially again. Most recently, enrolments have risen in line with community efforts to achieve this, but attendance rates remain at historically low levels.

It should be pointed out that the 1975 data are typical of the 1970s decade, prompting the anthropologist Stephen Harris to report following a visit to OLSH School in March 1978, 'with 336 children on the school roll and more than 95 per cent daily attendance, Port Keats is probably the largest Aboriginal school in the Northern Territory' (G. McCormack, pers. comm.). Likewise, Brother Pye reported for the early 1970s that there were 400 school pupils and a population of 450 under the age of 16 (Pye 1973: 46). These are very different observations to that made by Taylor (2004: 100) regarding the situation in 2003, 'only half of the region's school age population is enrolled at school, and only half of those enrolled actually attend classes, and even then often on an irregular basis'. A further contrast with the 1970s is that enrolment numbers and attendance are typically highest now at the first count of each school year and fall away rapidly thereafter, whereas data from the 1970s indicate that these remained consistently high throughout the year, with attendance rates falling only slightly in the last two months of the year (G. McCormack, pers. comm.).

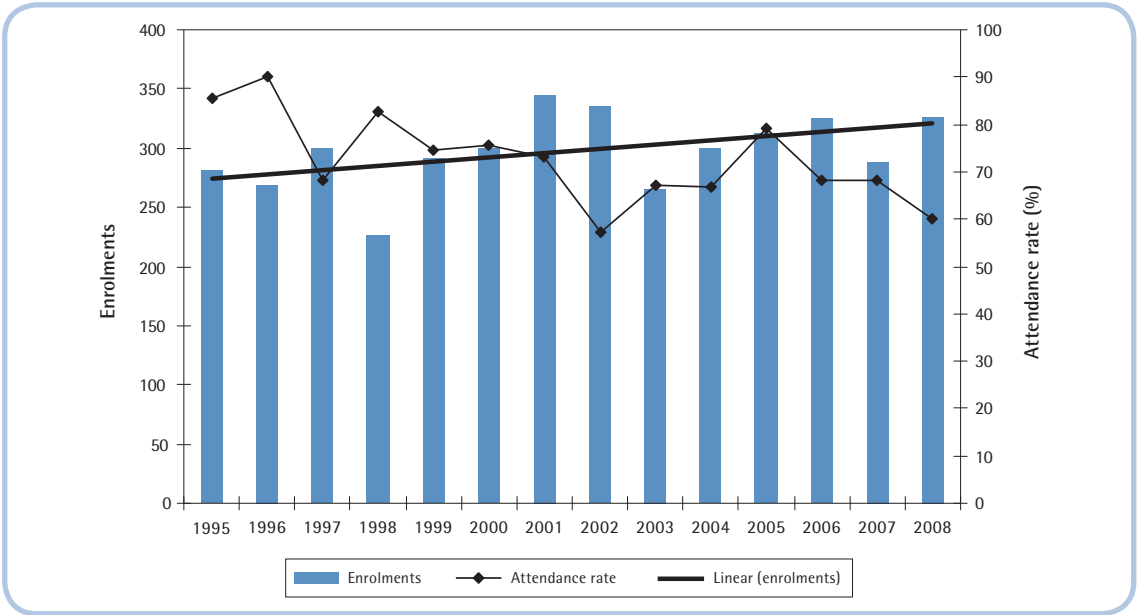
## RECENT TRENDS IN ENROLMENTS

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In order to examine trends in more recent times, the initial counts for each school year are used for preschool, primary and secondary enrolments and attendance, to reflect what is essentially the high point in each year covering the period from 1995–2008. Considered overall, school enrolments at Wadeye have increased over the past 14 years, as shown in Fig. 4. In 1995, enrolments at OLSHTCS were just over 400 at the beginning of the school year; by 2008 this had risen to almost 700. Even allowing for population growth, this represents a real rise in school engagement, although as Fig. 4 shows this has occurred largely as a result of a significant increase in enrolments in 2008 which is encouraging in terms of current school and community relations. While there appears to have been a boom or bust pattern of school enrolment over roughly three-year cycles, the underlying level has continued upwards.

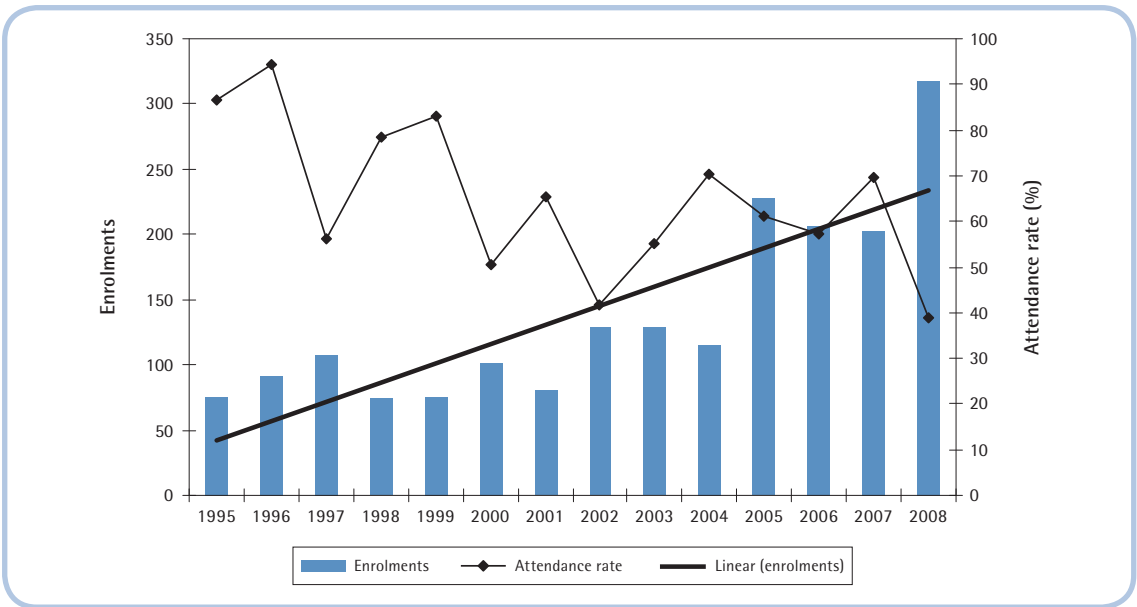
Fig. 5 then shows the trend in preschool enrolments and attendance. In light of government aims to achieve universal access to early childhood education the clear downward trend in enrolments since 1995 is concerning since this has occurred over a period of substantial growth in the population of preschool age. While very low preschool participation recorded in 2002 and 2003 has obviously contributed to this trend, enrolments in 2008 were still substantially down on previous historic levels. One measure of this is the fact that preschool enrolments at the start of 2008 school year (52) were lower than they were at the start of the 1975 school year (65). As for preschool attendance rates, these have been more stable over the period at between 60 and 80 per cent.

Fig. 6. Primary school enrolments and attendance rates, OLSHTCS, 1995–2008

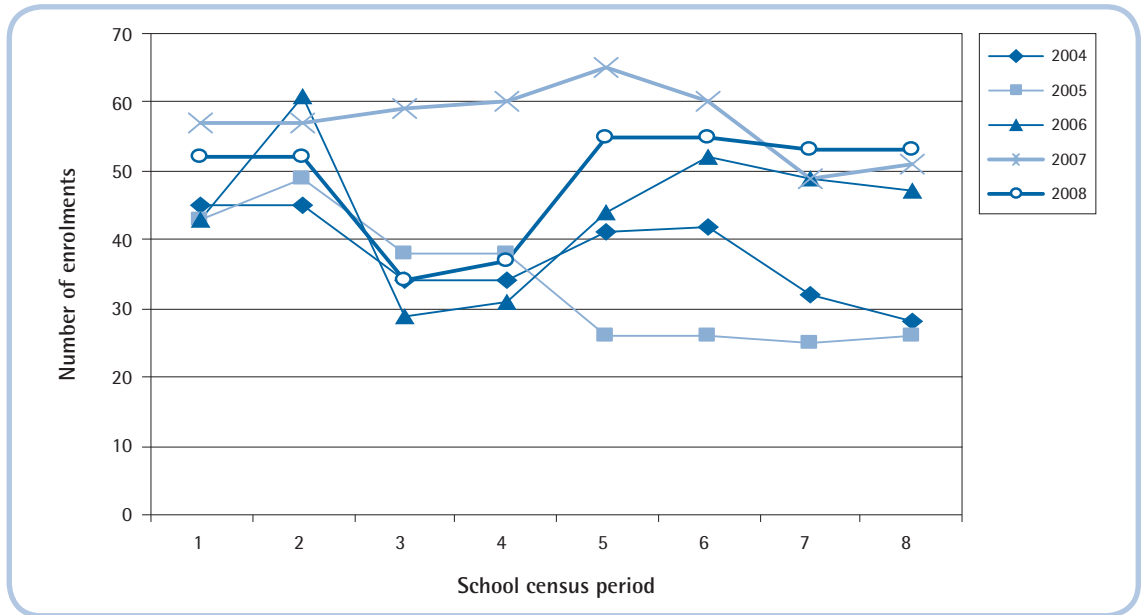


Source: Administrative data from NTCEO, Darwin.

Fig. 7. Secondary school enrolments and attendance rates, OLSHTCS, 1995–2008



Source: Administrative data from NTCEO, Darwin.

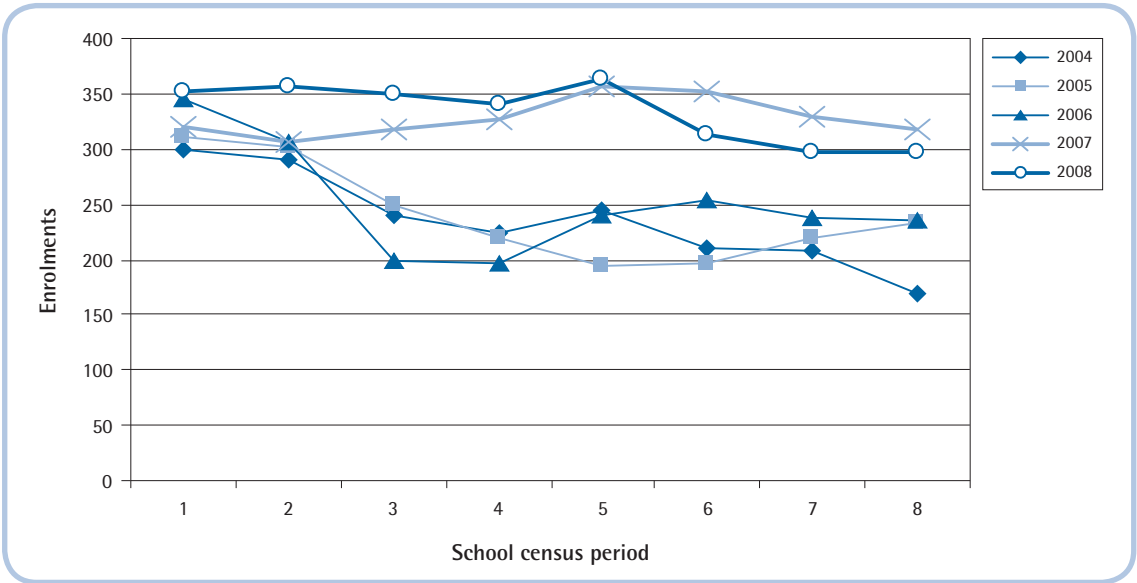
**Fig. 8. Number of preschool enrolments over each school year, OLSHTCS, 2004–08**

Source: Administrative data from NTCEO, Darwin.

While the situation regarding primary school enrolments is more encouraging as it shows an upward trend (Fig. 6), in truth this is only likely to have kept pace in the growth in primary school-age population. Of further concern is the steady reduction in the attendance rate over time from 90 per cent in 1995 to only 60 per cent in 2008. Enrolments at the secondary level have clearly advanced the most (Fig. 7). Historically, secondary enrolments have been low at Wadeye, and in the past Year 12 has been achieved via correspondence course or necessitated migration. The opening of the first stage of the secondary facility in 2007 has clearly changed this situation, and the enrolment level at the beginning of 2008 seems to reflect this. Also evident is the concerted effort of the Thamarrurr community and the school attendance team to encourage enrolments in 2005. However, as with primary schooling, this is tempered by the fact that attendance rates have declined, such that the actual numbers attending secondary school in 2008 were lower than in 1995.

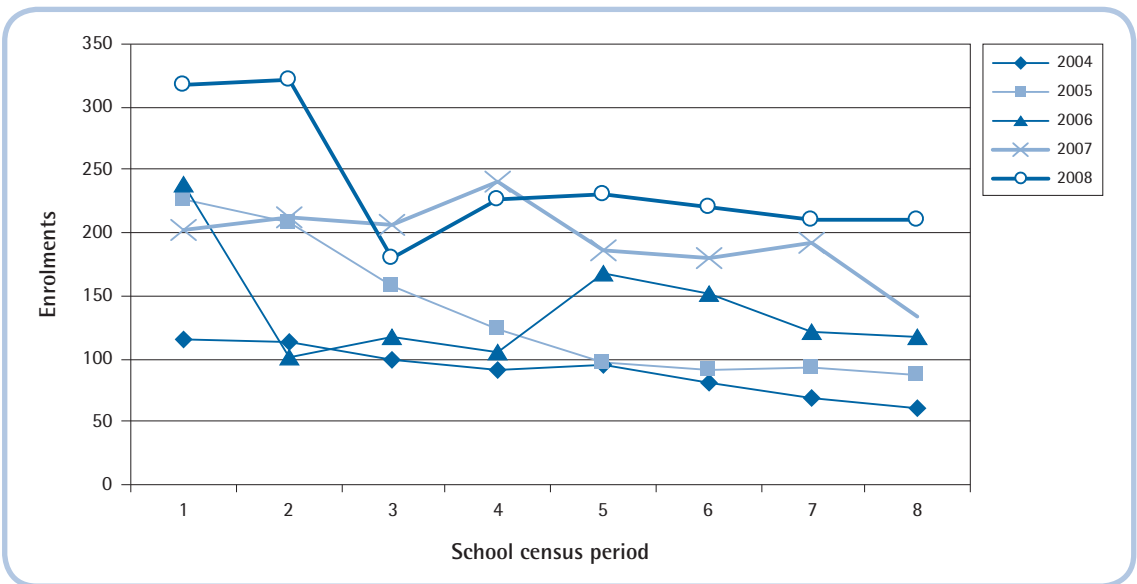
Another way of examining enrolment trends is to consider their distribution over the course of each school year, basically over the eight recording periods between February and December. Fig. 8 shows this for preschool enrolments over the course of each year for 2004–08. A fairly consistent pattern emerges whereby enrolments start high, then fall by mid-year, only to peak again after the mid-year break, with no consistent pattern to the end of each year. Although preschool enrolments remained steadily high throughout most of 2007, by 2008 the familiar pattern of a mid-year dip was resumed.

**Fig. 9. Number of primary school enrolments over each school year, OLSHTCS, 2004–08**

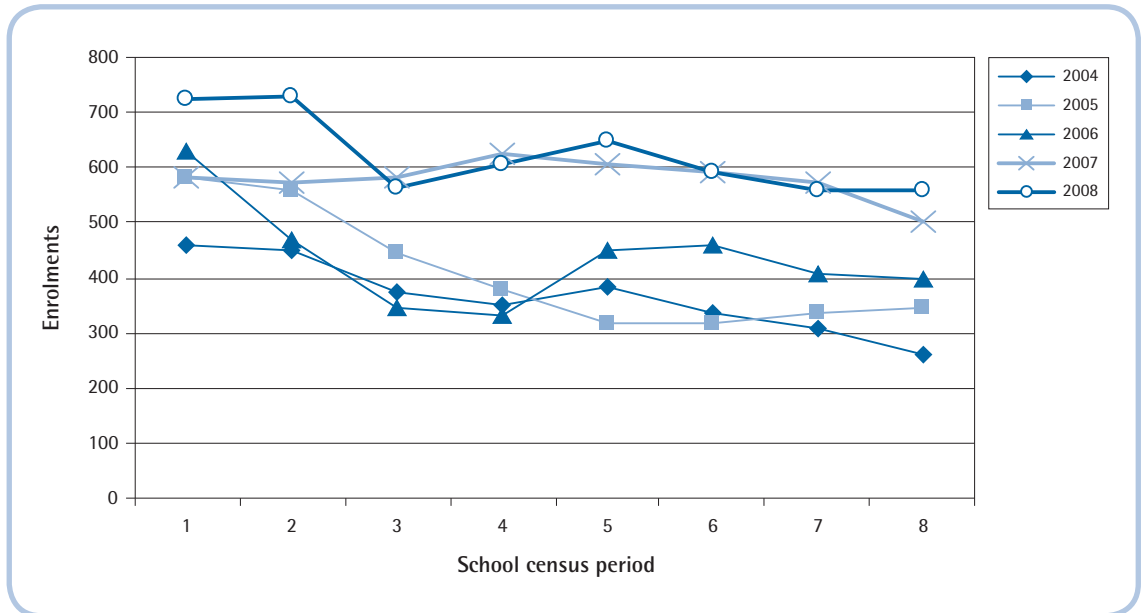


Source: Administrative data from NTCEO, Darwin.

**Fig. 10. Number of secondary school enrolments over each school year, OLSHTCS, 2004–08**



Source: Administrative data from NTCEO, Darwin.

**Fig. 11. All school enrolments over each school year, OLSHTCS, 2004–08**

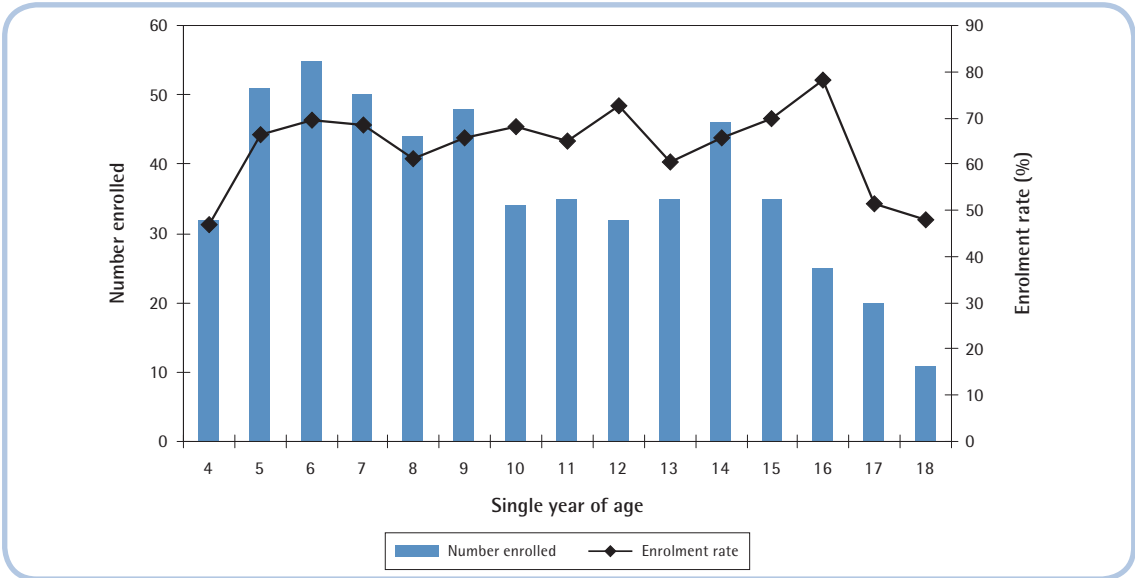
Source: Administrative data from NTCEO, Darwin.

In 2004, 2005 and 2006, primary school enrolments displayed a similar mid-year decline and then remained relatively low, but the pattern in the last two years has been more positive, with enrolments fairly steady throughout the year at 300–350 (Fig. 9).

As for secondary level (Fig. 10), here we see the customary dip following a peak at the beginning of the year (and this was most evident in 2008), but in 2007, and especially in 2008, a steady level of enrolments was achieved for the remainder of the school year. There is some indication that this trend was first established in 2006.

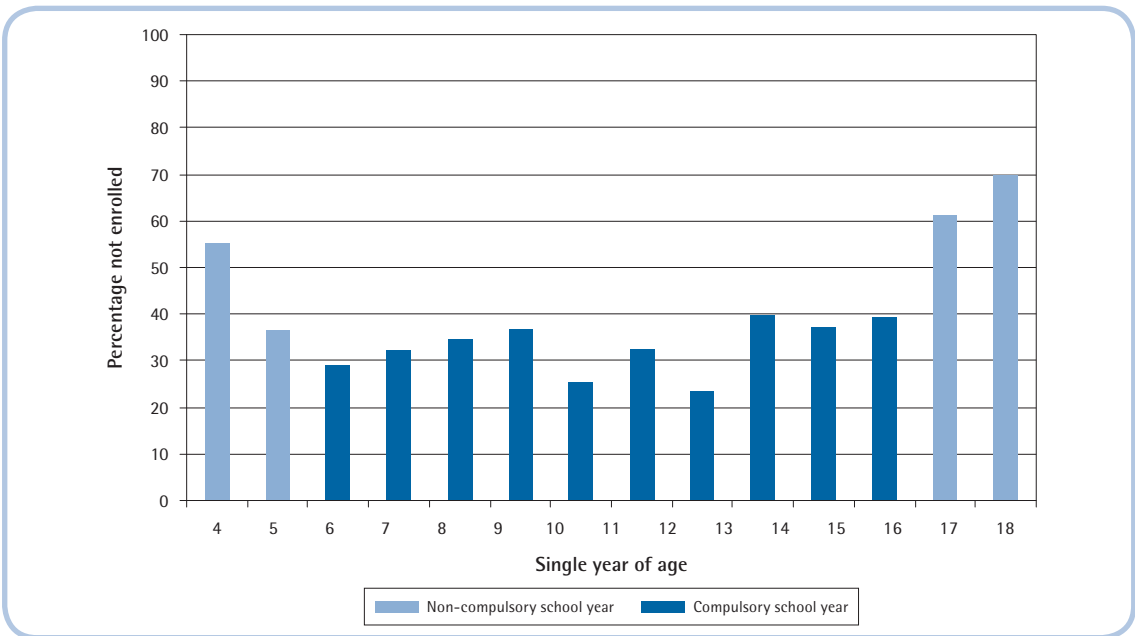
If we combine all of these enrolment data to obtain an aggregate picture across the whole school population (Fig. 11), it is apparent that the past two years in the history of OLSHTCS have been significant. Not only has there been steadily higher enrolment at the beginning of the school year, but this has been sustained at a higher level throughout the school year. It is worth considering what this means in a practical sense. Effectively, more children in the past two years have been entering the school gate, and they have been doing this on a more regular basis throughout the year. In terms of school participation, this is the first hurdle crossed. Of course, the next and more important hurdle, is to ensure that once enrolled, students actually attend on a regular basis. As we shall soon see, this presents an entirely different scenario.

**Fig. 12. Enrolment levels and rates by single year of age, OLSHTCS, 2009<sup>a</sup>**



Note: a. First school census period.  
 Source: Administrative data from NTCEO, Darwin.

**Fig. 13. Rates of non-enrolment by single year of age, Thamarrurr region, 2009**



Source: Administrative data from NTCEO, Darwin.

As for the numbers and rates of enrolment by single-year age group, Fig. 12 shows these for the beginning of the 2009 school year. Not surprisingly, enrolment numbers are highest in the compulsory school age range, especially in early primary. However, within this range the rate of enrolment is remarkably consistent, at around 60–70 per cent. It also shows that much needs to be done if government ambitions in terms of raising participation in early childhood schooling are to be achieved since less than 50 per cent of 4-year-olds are enrolled.

For a sense of the depth of non-enrolment it is useful to consider the inverse of enrolment data. Fig. 13 shows the percentage of each age group that is not enrolled. Once again, the early childhood issues stand out and high rates of non-enrolment at ages 16 and 17 are significant if the aim is to extend the compulsory school age range. However, of more immediate concern is the consistently high rate of non-enrolment across all of the compulsory school years—up to 40 per cent in secondary school years.

## DISABILITIES AND LEARNING DIFFICULTIES

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Discussion of enrolment levels would not be complete without some indication of the challenges presented by disabilities and learning difficulties among the student body. At Wadeye, these are far in excess of the levels in mainstream Australian society, both in proportion and severity. Although the scope of disability needs remain to be fully established against specialist assessment protocols, in June 2008 the school identified a total of 67 students as special needs students, including children with behaviour/learning difficulties, hearing impairment, multiple disabilities, visual impairment, spina bifida, Down syndrome, attention-deficit hyperactive disorder, thrombocytopenia-absent radius syndrome, sensory integration disorder, physical disabilities, neurological conditions, and other medical conditions. All of these special needs students were considered at particular risk of absenteeism because of difficulties in coping with school work due to teasing from other children, lack of assistance at school, difficulties experienced by family members in accompanying them to or at school, and family stresses that impact on the child. With the range of disabilities spread across school classrooms, teachers struggle to meet the needs of each individual.

In addition to this group there are students with learning difficulties defined in terms of significant problems in acquiring literacy and numeracy skills. This includes those who have dyslexia, specific reading difficulty, attention deficit disorder, attention-deficit hyperactivity disorder, and language and communication difficulties. Typically, students with learning difficulties have memory and organisational problems and fail to make satisfactory progress with regular school curricula. The practise at OLSHTCS is to identify such students through the formal National Assessment Program—Literacy and Numeracy (NAPLAN) testing process as failing to reach basic literacy and numeracy benchmarks. In that case, an indication of the sizeable scale of learning difficulties at the school is provided by the very small numbers who achieve NAPLAN benchmarks. Of course, implicit in national benchmarking is some notion of comparing like with like. This is far from the case at Wadeye, where NAPLAN outcomes are substantially impacted by the linguistic background of most students (English as a second language), by chronic conditions such as otitis

media, and by the limited capacity for parental involvement in school pursuits, exacerbated (amongst other things) by crowded living conditions. In these circumstances, it is not entirely clear what NAPLAN is measuring. In any event, the more crucial measure of school performance is regular attendance in class.

## DAYS IN ATTENDANCE

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Enrolment data simply reflect periodic counts of the number of individuals registered on the school roll. They are cross-sectional. As we have seen, these numbers shows signs of improvement in recent years, though shortfalls still occur. From an outcomes perspective, of greater interest is a continuous measure of the extent to which each individual registered turns up each day throughout the year. A logical connection between overall attendance and performance has often been claimed, yet there is a surprising lack of empirical evaluation of the relationship between individual attendance and achievement (Gottfried 2009). What does exist, though, is strongly indicative of a positive and significant relationship (Gottfried 2009). Not surprisingly, then, the 1999 Collins Review of Indigenous education in the Northern Territory took the position that, as a first requirement, children must attend school consistently in order to progress. 'Consistent' here was taken to mean a minimum of 80 per cent of available days (Northern Territory Department of Education (NTDET) 1999: 142). The review found that in relation to Indigenous education, poor attendance was without doubt the primary cause of poor educational outcomes (NTDET 1999: 141). Given this relationship, it is important to establish as precise a measure of attendance as possible.

The current method for reporting attendance is to establish average attendance during in each census period. Using such data it has been repeatedly shown that Indigenous attendance levels in the Northern Territory are a mere subset of enrolments with these often falling substantially below enrolment levels—even down to half the level as shown above (NTDET 1999; Steering Committee for the Review of Government Service Provision 2009; Taylor 2004). Of course, the problem with averages is the lack of any indication of the spread of data around the mean. The more relevant and important measure that is available, and that should be used to assess education shortfalls, is the number of days throughout the school year that each individual child on the school roll actually attends class (Gray & Partington 2003). This reveals far more about the true level of exposure to education. On a further point, it is conventional in education statistics to use the term 'attendance'. This is understandable, because for the most part that is what school registers are measuring. However, at Wadeye, it might be more meaningful to talk about rates of 'absenteeism', or more strictly in terms of the Northern Territory Education Act, rates of 'truancy' (see Gray & Partington 2003), although here use of the former, more literal, term is retained.

The reason for this aside is made apparent by Table 6, which shows the distribution of students who appeared on the OLSHTCS roll at some time during the school year in 2008. Before considering these figures it is necessary to understand a couple of points. First of all, a total of 874 individuals appeared on the school roll during 2008. However, only 634 of these were consistently recorded on the roll for each week of the year. The remaining 240 only appeared intermittently. This tells us two things. First, that almost all children

**Table 6. Number of days in attendance for those on the OLSHTCS roll throughout the school year, 2008**

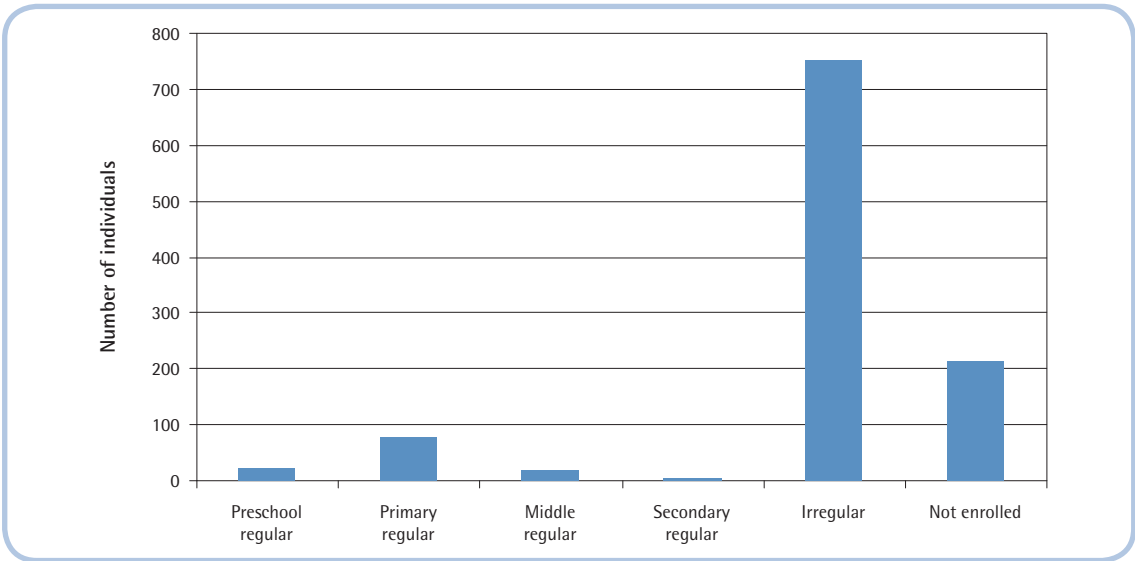
Days attending	Preschool	Primary	Middle	Secondary	Total
189	10	17	9	2	38
151–188	12	61	9	2	84
113–150	12	68	10	4	94
76–112	20	94	15	12	141
38–75	14	125	40	34	213
1–37	0	42	6	16	64
<b>Total</b>	<b>68</b>	<b>407</b>	<b>89</b>	<b>70</b>	<b>634</b>

Source: Administrative data from NTCEO, Darwin.

in the region have formally entered the school premises at some time during the year. Secondly, that only about two-thirds of these may be said to constitute the potential regulars at OLSHTCS. Of course, an issue immediately arises as to whether those who are intermittently enrolled attend some other school in the meantime. As we shall see in a moment, the answer to this is not entirely clear.

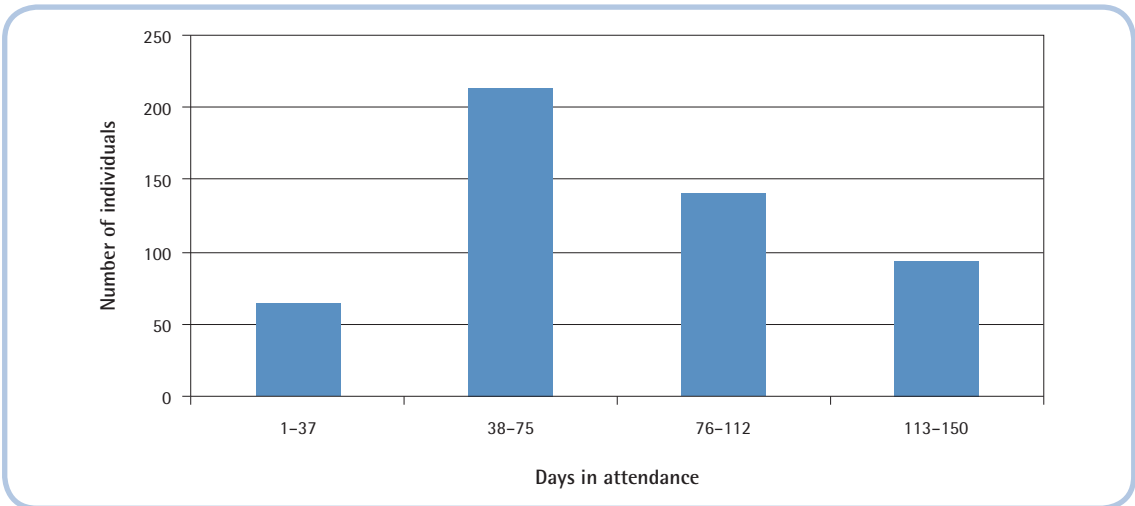
Returning to Table 6, this refers to the subgroup of enrolments that comprise the core of potential regulars at OLSHTCS. We can see that during 2008 there were a total of 189 days available for school attendance, although up to 20 of these days were effectively lost to schooling due to infrastructure failures and funerals. If we take attendance for 151 of these days as the minimum necessary to be classified as a regular attendee in line with the Collins Review (NTDET 1999: 142), then we find that only 122 (19%) of the 634 children who appeared consistently on the school roll could be classified as such. As shown, these were mostly in primary years—in secondary years there were only four! Thus, by far the largest group of students that appeared consistently on the school roll in 2008 were irregular attendees (512, or 81%). In other words, most children attended school for less than 151 days of the year. If we add to these those who appeared only intermittently on the school roll in that same year, then the number of irregular attendees rises to 752, as shown in Fig. 14.

**Fig. 14. Attendance/enrolment status of the Thamarrurr region student population, OLSHTCS school year, 2008**



Source: Administrative data from NTCEO, Darwin.

**Fig. 15. Irregular school attendees<sup>a</sup> by number of days in attendance, OLSHTCS school year, 2008**



Note: a. Those consistently on the school roll in 2008.

Source: Administrative data from NTCEO, Darwin.

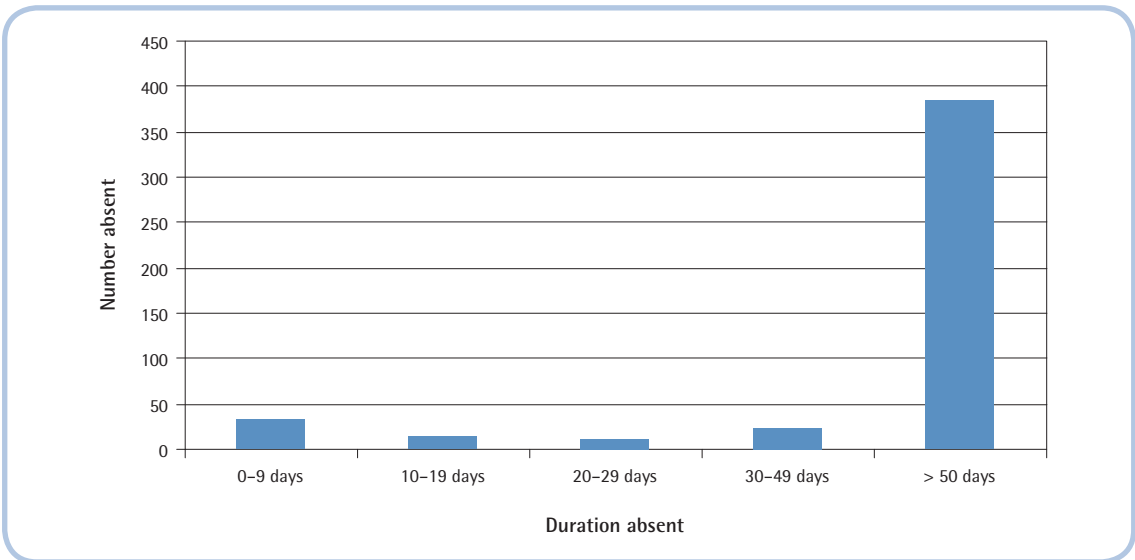
As for those consistently on the roll, if all of the 'irregulars' attended for just marginally less than 151 days then of course we could discard their classification as a statistical semantic. But, as Fig. 15 shows, the vast majority (418, or 82%) of this group were in attendance for less than 112 days (roughly half the school year), and most of these (277) attended for less than 75 days. Therefore, this block of 418 children may be said to represent an unequivocal hard core of disengaged students. However, Fig. 14 also identifies a further 213 children of compulsory school age who were not enrolled at the first school census of 2009, and there are those also who only appear intermittently on the OLSHTCS roll. It would appear, then, that from a regional population of just over 1,000 who come into the frame for schooling purposes, as much as three-quarters of these could be chronically disconnected from education, at least in respect of education provided by OLSHTCS. This is a very substantial proportion, especially when set against the opinion of an experienced Northern Territory school principal as reported to the Collins Review:

Five days a week is the optimum with the amount of information the kids absorb these days, four days out of five on average is the minimum, three borderline, and anything less than that is child-minding, not teaching (NTDET 1999: 142).

Of course, it is possible that those referred to above as non-attendees, or as not enrolled, could be enrolled and in attendance at schools elsewhere in the Northern Territory and, in some cases, in Western Australia. It is known, for example, that a few Thamarrurr-based students attend school in Darwin (at St John's and Kormilda), at Woolaning, at Daly River, Peppimenarti, Palumpa, Kununurra, possibly at Belyuen and Timber Creek, and sometimes at Nguiu. However, as far as could be determined, these outside enrolments in 2009 were accounted for by community survey and they have been added to the Thamarrurr tally of enrolments. To this extent, the 213 non-enrolments shown in Fig. 14 are therefore net of any external enrolments. At the same time, because the NTCEO system for tracking students using unique pupil numbers as they move between schools is not integrated with the NTDET student tracker system, there is currently no way of synchronising non-attendees at Wadeye with possible attendance elsewhere throughout the school year, except, of course, within the NTCEO tracking system. While some uncertainty therefore surrounds the true level of absence from schooling, the prospect that Thamarrurr residents are not present at school in Wadeye because they are in attendance at school elsewhere appears tenuous given indications that such levels of absence are widespread in the Northern Territory and have been for some time (NTDET 1999). Nor does it appear to be a recent phenomenon given the findings of the Collins Review.

On this assessment then, the high degree of disengagement from schooling at OLSHTCS seems real enough. However, just how far back this disengagement goes is hard to say with precision given a lack of data, but information on days absent from OLSHTCS in 2002 (Fig. 16) reveals a similar picture seven years prior. One might imagine that this did not suddenly emerge at that time suggesting a pattern that extends back at least to the 1990s—a notion that is consistent with the social history outlined by Nganbe and McCormack (2009) and the data shown in Fig. 3 for the period 1975–2005. What, then, are the consequences of such long-standing disengagement? This is now considered in the context of regional employment statistics.

**Fig. 16. Duration of absences from OLSH, 2002**



Source: Taylor 2004: 64.

## LABOUR FORCE STATUS

The mission settlement of Port Keats was established for the purposes of welfare administration and evangelism. It had no modern economic base, short of the activities required for self-provisioning, and it has struggled ever since to find one. This, combined with the decline of regular schooling and employment as a social norm, has produced an economy that is dominated by transfer payments from government. Today, the annual value of government benefits and pensions paid to Thamarrurr residents is estimated at \$12.9 million. Given the sheer number of Centrelink customer payments (680 in June 2008), it is likely that this provides the main source of income for most families. Caution is expressed here because we lack data on the amount and distribution of income from employment and any other sources. In 2003, employment income was estimated at less than 20 per cent of total income (Taylor 2004).

However, the overall contribution from employment must have risen considerably in recent years because there has been a substantial increase in salaried positions occupied by local people. In May 2009, these numbered 438 to produce an employment rate of 30 per cent—a doubling from 16 per cent in 2003. Much of this reflects an increase in Community Development Employment Program (CDEP) participant numbers in recent years, as well as the conversion of some previous CDEP positions into mainstream salaried positions. Some is also due to an increase in market-sector activity stimulated by the TDC, most notably to date in

relation to building construction, accommodation, land management, employment services and forestry. The key question for the immediate future is whether the employment rate will remain at this higher level given plans to reduce CDEP participant numbers under the new employment services model introduced in July 2009 and it remains to be seen what the impact on employment numbers is going to be. This underlines the importance of shifts in government policy and program delivery on economic indicators.

Remote community economies can be described as 'hybrid' as they have a customary sector (non-market) in addition to (or overlapping with) government and market-related activities (Altman 2001). This is the case in the Thamarrurr region, although the economic value of local customary activity in terms of output and labour input has never been established. Certainly, the seas, mangroves, and flood plains that characterise the region provide a rich resource for plant and fauna harvesting, especially at outstations, and people do engage in land and sea management activities. However, in a formal sense this refers mostly to the 28 individuals who were employed by Thamarrurr Rangers as of June 2009. Also, while artistic tradition is retained in the region and attempts have been made to establish it on a commercial footing, this has never been successfully achieved, certainly not in terms of the sales and levels of participation seen in some other locations (Morphy 2005). However, it does provide a source of activity and occasional income for some individuals.

## THE CURRENT SITUATION

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The distribution of the adult Indigenous population (those aged over 15 years) according to labour force status categories in 2009 was established by a combination of assistance from personnel at TDC, Thamarrurr Job Futures, Victoria-Daly Shire and OLSHTCS. These assisted in compiling a list of all Aboriginal employees in the region as of June 2009. The critical occupational division sought was between CDEP and other 'mainstream' jobs, although particular employment categories were also established. As for determining those unemployed or not in the labour force, this is more difficult, even using conventional labour force survey techniques given that such individuals are invariably on Centrelink payments and are often not aware of the subtleties of unemployment definitions. As a substitute to a costly and labour-intensive household survey, Centrelink payments data provided by the Department of Families, Housing, Community Services and Indigenous Affairs for June 2008 were used to establish the number of Newstart Allowance and Youth Allowance payments. While not ideal, these do provide some measure of the likely scale of unemployment and, by default, an indication of overall labour force participation. The results for 2009 are shown in Table 7, and it is instructive to compare these with the situation five years earlier, shown in Table 8.

**Table 7. Distribution of labour force status of Indigenous adults in the Thamarrurr region, 2009**

	Employed			Unemployed <sup>a</sup>	Not in the labour force	Total 15+
	CDEP	Mainstream	Total			
Number	233	205	438	341	658	1,437
Percentage of 15+	16.2	14.3	30.5	23.7	45.8	100.0

Note: a. Centrelink payments data June 2008.

Source: Author's fieldwork and administrative data supplied by Centrelink, 2009.

**Table 8. Distribution of labour force status of Indigenous adults in the Thamarrurr region, 2003**

	Employed			Unemployed <sup>a</sup>	Not in the labour force	Total 15+
	CDEP	Mainstream	Total			
Number	133	45	178	449	477	1,104
Percentage of 15+	12.0	4.1	16.1	40.7	43.2	100.0

Note: a. Centrelink payments data June 2003.

Source: Taylor 2004: 41.

First of all, it is apparent that the overall level of labour force participation (those employed plus those unemployed as a percentage of the 15+ population) has barely altered (54.2% in 2009 compared to 56.8% in 2003)—if anything, it has slightly fallen. These figures compare to a participation rate for the total Northern Territory adult population in May 2009 of 75.8 (ABS 2009b).

While the labour force participation rate is clearly low in relative terms and has been stable in recent times, the more interesting observation is the sizeable shift in unemployment and mainstream employment rates over the past five years. In 2009, a total of 438 adults were employed indicating a substantial increase of 260, or 146 per cent over the six-year period. While this reflects an almost doubling in the number of CDEP participants the most visible expansion has been in mainstream jobs. These have increased by 160, or more than 350 per cent. While this rate of growth does seem spectacular, it should be remembered that it derives from a very low base. To some extent it also represents the restructuring of existing CDEP jobs to overcome cost-shifting and this is reflected in the fact that most of those now registered as CDEP workers are relatively new participants. At the same time, there has been genuine job creation due to the commercial activities of the TDC and new funding flowing into the region mostly through the Victoria-Daly Shire and the school.

The introduction of new employment services arrangements on 1 July 2009 is likely to have impacted on the employment rate, at least in the immediate term, by reducing CDEP participant numbers to match new quota requirements, and then by the inevitable attrition from CDEP with participants unable to rejoin the program if they leave. Ultimately, by 2011, it is proposed that CDEP will be phased out altogether, with all job-seekers required to register with an employment services provider. At Wadeye, Job Futures is the current provider. The other likely impact of these changes is that the unemployment rate will rise substantially. In May 2009, the unemployment rate at Wadeye calculated as a proportion of the labour force was 43.8 per cent. This compared to a national rate of 5.7 per cent. If all current CDEP participants were to transfer immediately to an employment service provider the rate at Wadeye could be as high as 74 per cent. Thus, in order to avoid a worsening of labour force indicators at Wadeye, much is going to depend on the ability of providers to develop successful employment pathways. While raising labour demand is one side of this task, here we are focused more on the labour supply-side. In this regard it is instructive to consider how younger and older adults (15–34 and 35–64 age groups) are situated in the local labour market given their quite different experience of education. Table 9 shows the situation for the younger adult group, while Fig. 17 shows the same information graphically.

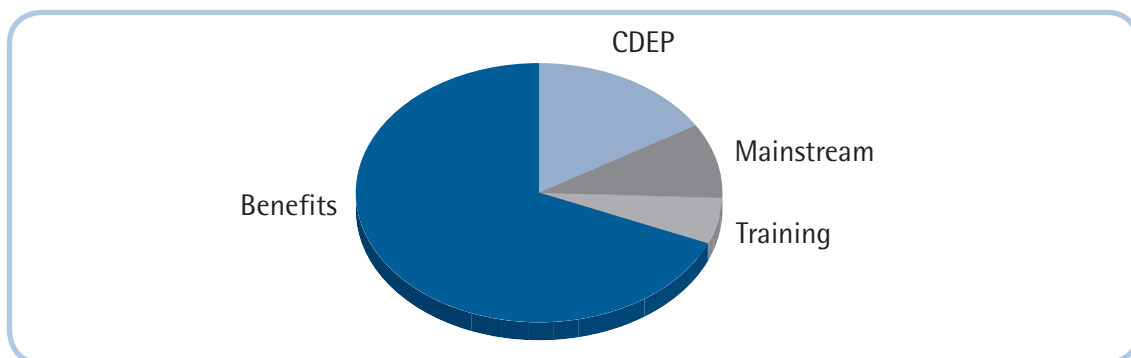
**Table 9. Labour force status of younger Indigenous residents of the Thamarrurr region aged 15–34, May 2009**

	Employed			Not in the labour force <sup>a</sup>	Total 15–34
	CDEP	Mainstream	In training		
Number	134	77	47	626	951
Percentage of 15–34	14.1	8.1	4.9	70.8	100.0

Note: a. A total of 67 individuals aged 16–21 are still enrolled at OLSHTCS. These are excluded from the count of 'not in the labour force'.

Source: Author's fieldwork.

**Fig. 17. Labour force status of younger Indigenous residents of the Thamarrurr region aged 15–34, 2009**



Source: Author's fieldwork.

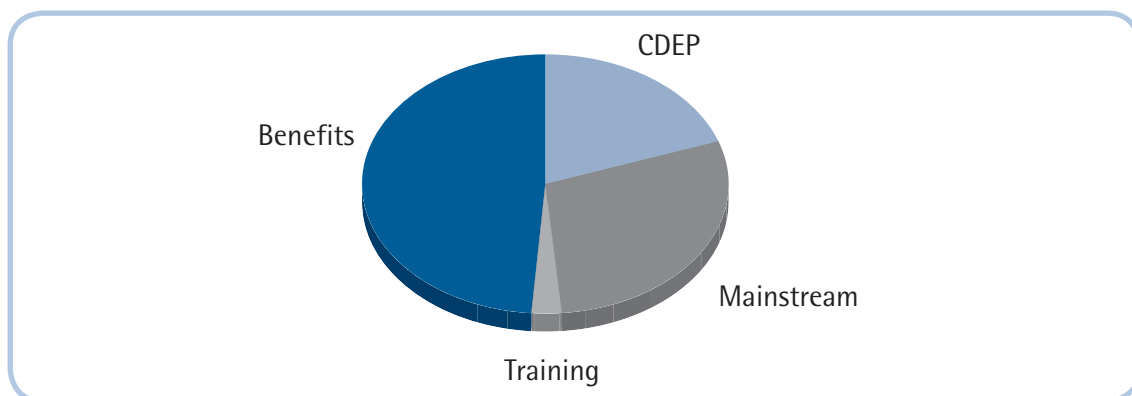
Of the 951 individuals aged 15–34 years, 211 of these (22%) were employed in May 2009, although 63 per cent of this employment was in CDEP which is significant given the observations just made about changes to CDEP. As noted, since 1 July 2009 the employment status of this latter group is now less certain. A further 47 individuals (5%) were in training while 67 were still enrolled at school. This leaves the vast majority of younger adults (626, or 71%) presumably on some form of welfare benefit, although these seem not to have been payments related to the labour market because Centrelink records from June 2008 indicated only 341 Newstart and Youth Allowance payments for all adults at Wadeye (more up-to-date data were requested but not provided). Assuming that the June 2008 figures remain indicative, this raises questions about the degree to which individuals in this age group are even registered with Centrelink, a question that a number of locally-based service providers (including Centrelink itself) have raised over recent years.

**Table 10. Labour force status of older Indigenous residents of the Thamarrurr region aged 35–64, 2009**

	Employed			Not in the labour force	Total 35–64
	CDEP	Mainstream	In training		
Number	89	132	12	204	437
Percentage of 35–64	20.3	30.2	2.7	46.8	100.0

Source: Author's fieldwork.

**Fig. 18. Labour force status of older Indigenous residents of the Thamarrurr region aged 35–64, 2009**



Source: Author's fieldwork.

The situation for older adults aged 35–64 years is more positive (Table 10 & Fig. 18). Among this group, more than half (50.5%) were employed, and the majority of these (60%) were in mainstream jobs. Fewer older adults were in training at any one time, and just under half of this group (47%) were not in the labour force.

To contrast the circumstances of these cohorts, there is a substantial gap between rates of mainstream employment and the degree of labour force participation. While the number of Indigenous workers in mainstream jobs has expanded in recent years, those moving into such positions have been mostly older workers. By contrast, the expansion of CDEP places has mostly absorbed younger workers. One striking example of this imbalance by age group is found at OLSHTCS itself, where 37 (66%) of the 56 local Aboriginal

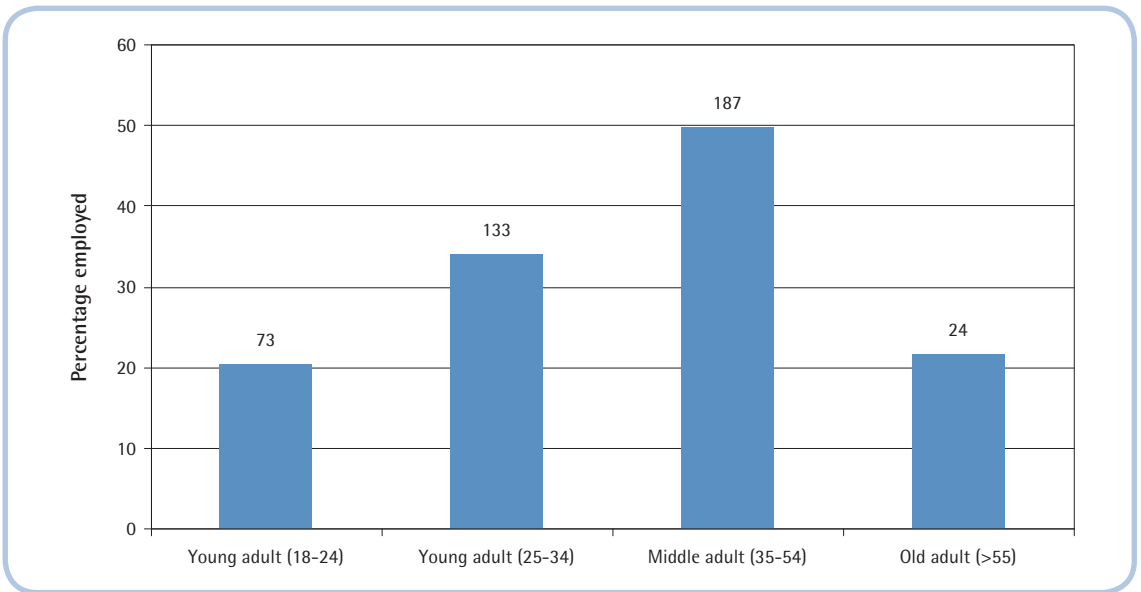
staff employed are over 35 years of age. At the clinic, only three out of 19 local Aboriginal staff are under 35 years of age.

This analysis is further disaggregated in Figs 19 and 20. What these show is the distribution and number of individuals employed and not employed in the various age categories that are of interest for remedial intervention. At face value, these data might be seen as encouraging. Fig. 19, for example, indicates a rise in employment along with increasing age with the middle-aged adults being the most employed. If this simply reflects a life course progression into employment then one might expect those of younger age to gradually assume the jobs that older workers now occupy as the latter move into retirement age. In other words, there would seem to be future job guarantees in the regional labour market for younger adults as a consequence of natural attrition in the current workforce. However, this cannot be simply assumed.

When confronted with these data, a common observation of key employers at Wadeye (TDC, Victoria-Daly Shire, Thamarrurr Rangers & OLSHTCS) was that younger adults were far less likely to have the requisite schooling experience and associated literacy, numeracy and job-aptitude skills compared to older workers. As a consequence, they were much harder to employ and retain given the nature of the modern workplace and associated requirements regarding occupational health and safety regulations and the need for capacity to achieve accredited training. A typical example of such a response was from Thamarrurr Rangers who indicated substantial interest from potential younger employees, but an inability to hold on to many of them because of their lack of basic literacy and numeracy skills and understanding of workplace practices. The fact is, Thamarrurr Rangers are fully occupied in raising the skill levels of existing employees and are not in a position to provide for remedial training. The complaint from employers such as the Rangers was that they do not have the capacity or, indeed, the responsibility, for ensuring that young men and women arrive at the workplace with basic literacy and numeracy skills. In the modern labour market it is assumed that schooling and, if necessary, the vocational education and training (VET) sector, would have achieved this.

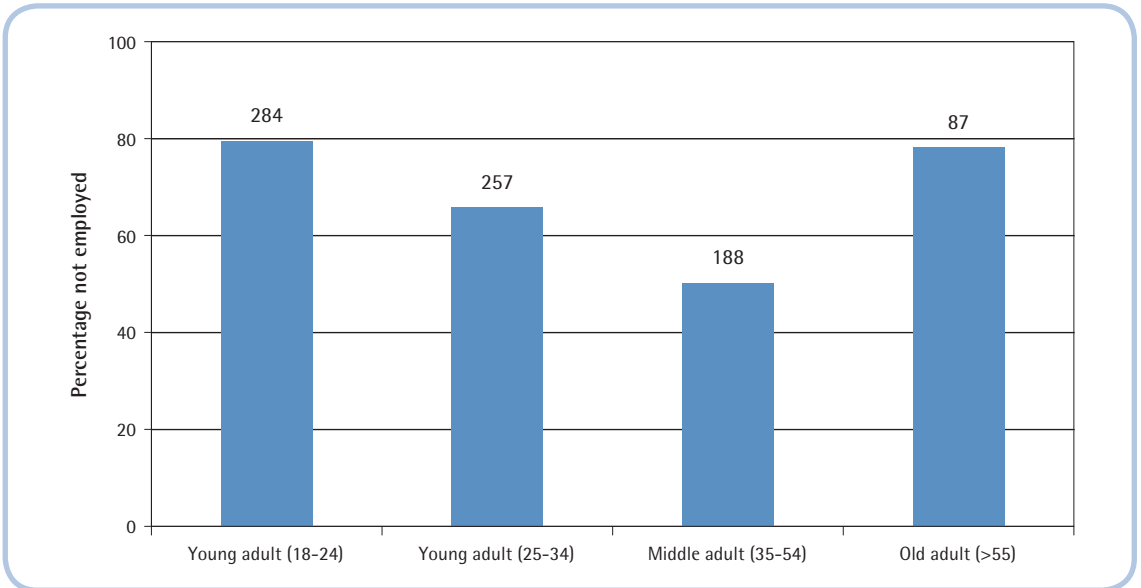
These observations are interesting when set against the age distribution of employment. One argument advanced to explain the relative disengagement of contemporary Indigenous youth from labour force participation in remote communities is that the generation entering adulthood in the 1980s and 1990s encountered a mismatch between the expectations of what could be done with basic literacy and numeracy skills and a growing demand for more complex vocationally oriented literacy and numeracy proficiency and accreditation. In other words, the post-1980s adult generation only appeared illiterate when compared to the 'mission generation' because they were being measured against higher standards (Kral forthcoming). While there is certainly truth in the observation that standards and accreditation required for workplace participation have risen, the simple fact is that in Thamarrurr region to date, the 'mission generation' has been the most able to comply with such requirements.

**Fig. 19. Percentage of Indigenous age group employed, Thamarrurr region, 2009**



Source: Author's fieldwork.

**Fig. 20. Percentage of Indigenous age group not employed, Thamarrurr region, 2009**



Source: Author's fieldwork.

## FUTURE PARTICIPATION

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A stated aim of the COAG National Partnership Agreement is to halve the employment gap between Indigenous and other Australians within a decade (by 2016). What might this imply in the Thamarrurr region in terms of extra jobs required? One way to estimate this is to compare the current gap between the local and national employment rates and calculate the number of additional jobs required in 10 years time to reach the mid-point between the two rates. However, to do this we need to take account of population growth.

According to the Series 2 projection, the regional population of working age is estimated to rise from 1,437 to 1,921 by 2019—an increase of 484 persons, or 34 per cent. Realistically, though, it is those in the age range of 15–49 who are likely to be targeted for emerging opportunities in the regional labour market and this age group is set to increase from 1,258 to 1,670—an increase of 412 persons, or 33 per cent. Currently, there are 372 individuals aged 15–49 who are employed (including 187 in CDEP). This produces an employment rate for this age group of 29.6 per cent. For the same age group in the general Australian population the employment rate is 69.3 per cent.

Two future employment scenarios are explored in Table 11. The first considers the number of jobs that would be required by 2019 if the current employment rate for the 15–49 age group in the Thamarrurr region is to remain unchanged at 29.6 per cent (inclusive of CDEP). The answer is 494, or an additional 122 jobs. This is simply to ensure that the current employment rate does not recede over the next decade. The second scenario considers the extra jobs required to achieve the government target of halving the employment gap. This shows that a total of 663 jobs would be required, an increase of 291 or 78 per cent higher than the current level.

It is clear that substantial transformation is needed not just in the numbers employed but also in the underlying rate of labour force participation if the COAG employment target were to be achieved in the Thamarrurr region. Basically, the numbers in work would need to almost double by 2019. While substantial employment gains have been made in recent years at Wadeye, these have been shown to have been substantially assisted by CDEP expansion, an avenue that is no longer available. Also, the growth of non-CDEP jobs has mostly been among older adults with many younger adults (those who will need to be targeted for jobs if the target is to be met) being structurally disengaged, most likely due to a lack of literacy, numeracy and job-readiness.

As for changes to CDEP, most people now on the program are new participants with many previous participants having shifted to mainstream job status as cost-shifting from the old program has been phased out. In the new arrangements, CDEP is reconfigured as a training and work preparation program for transition into non-CDEP jobs. However, there remains substantial turnover in participation with individuals often signing themselves off due to poor attendance. In such cases, Newstart provides the default arrangement but there will now be an obligation to enter training or work for the dole. However, this raises the question of

**Table 11. Extra jobs required in the Thamarrurr region between 2009 and 2019 against select employment rate targets for the age group 15–49**

Employment rate in 2009	Base employment 2009	Total jobs required by 2019	Extra jobs required by 2019
29.6 <sup>a</sup>	372	494 <sup>c</sup>	122
39.7 <sup>b</sup>	372	663	291

**Notes:** a. The Indigenous employment-to-population ratio for Thamarrurr inclusive of CDEP.  
 b. Halfway to the Australian employment-to-population ratio (2006 Census-based).  
 c. Based on Series 2 projection of the group aged 15–49 in 2019 (1,670).

**Source:** Author's own calculations.

adequate resources and opportunities to fulfil such requirements and the reality is that many individuals become locked into a cycle of dependence on benefits. In this context, CDEP might be seen as a voluntary work program with those who persist in it aiming for more stable opportunities. The balance, much of which includes individuals in the 15–34 age group, remains as an underclass on various benefits with little effective engagement in work or self-improvement programs.

Immediate avenues for achieving employment generation appear to be associated with activities such as the construction and maintenance of housing and physical infrastructure (including roads), education, health services, retailing, public administration, transport, media, land restoration, land management, and tourism. Some of the diversity in economic activity encompassed here is already in place. The TDC, for example, has plans to expand its activities in forestry, cattle, civil construction and building, quarrying, horticulture, natural resource management, tourism, accommodation, and retail, while other activities are planned involving housing construction via the Strategic Indigenous Housing and Infrastructure Program.

It remains the case, though, that many regionally-based jobs are occupied by imported workers, as they tend to be managerial, professional and trade positions that require higher-level qualifications and job aptitude. While there is unlikely to be rapid localisation of such positions, this does not obviate the need to tackle deep supply-side structural hurdles if local people are to successfully engage in waged labour. In particular, there is a pressing need to provide remedial literacy, numeracy and work-readiness training to the large number of adults who have already left schooling with little foundation for mainstream economic participation.

## REMEDIAL NEEDS

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An inevitable consequence of the disengagement from formal schooling on the depth and scale indicated at Wadeye is a widespread lack of literacy and numeracy skills at a level necessary for modern workforce participation, especially among adults aged under 35. This has not been established in any systematic and rigorous way; it is more a logical inference from the recent history of lack of schooling and the practical experience of employers in the region, including those such as the CDEP scheme and Thamarrurr Rangers, who have sought to develop alternatives to more mainstream employment environments yet still struggle to recruit and retain people for want of basic job competencies. If a lack of requisite skills that should have been imparted during years of compulsory schooling are now manifest as an obstacle to workforce engagement then a moral question arises as to responsibilities for remedial action.

In this regard it is worth recalling the aspirations of the Thamarrurr leadership to ensure opportunity for everyone to develop their personality, talents and abilities to the fullest possible extent, and to improve their employment prospects and prospects for advancement in Australian society. As we have seen, these aspirations are far from fulfilled, especially in respect of younger adults aged between 15 and 34. Given the demographic shift that is underway the issue of providing remedial education for younger adults is perhaps the largest and most pressing of all the social and economic challenges currently facing the community of the Thamarrurr region.

From Table 9 we know that there are 626 young adults aged 15–34 who are not in the labour force. On top of this, as of May 2009, there were 134 in CDEP (many of whom by now are likely to have been reassigned to Job Futures), and only 77 in mainstream work. Of course, there will be some in this group who have valid reasons not to be in the workforce (e.g. school attendance and child rearing), and yet others who have more than adequate skills already. However, this is unlikely to diminish the fact that persons requiring remedial assistance are likely counted in the hundreds, and that is only including those up to age 35.

While these figures provide some indication of the potential scale of remedial action, an immediate issue that arises is that no comprehensive formal professional audit of skills and aptitude currently exists for adults in the region and there is an urgent need to establish this. In the meantime, many employers (Victoria-Daly Shire, Thamarrurr Rangers) have applied their own informal (subjective) assessment of basic literacy and numeracy. While this remains far from adequate, it does point to significant shortfalls especially among younger job-seekers. Centrelink also conducts a basic assessment of aptitudes via its Job Seeker Classification Instrument, but data from this were not available. At the time of writing, Job Futures was assuming responsibility for constructing estimates of remedial needs, although once again this was not to hand.

For a long time at Wadeye there has been confusion over responsibility for ensuring that those who have moved beyond school age have the best available support and opportunities to become active participants in productive economic activity. The main action here has been focused on arrangements via the Batchelor

Institute of Indigenous Tertiary Education to provide accredited vocational education, focusing initially on Certificate II in General Construction leading to Certificate III and Certificates I, II and III in Written and Spoken English (CWSE). More recently, Job Futures has arranged for training in four-wheel driving, empowerment, first aid, learner drivers, and saw mill operations. The main issue here concerns participant numbers; or rather, the lack of them.

As of May 2009, enrolment in the CWSE courses totalled 50, while the number of enrolments in all other training courses amounted to 58. Most of these enrolments involved people who were already in work positions, either in CDEP or otherwise (e.g. Thamarrurr Rangers). One difficulty in interpreting these figures, at least with the CWSE courses, is the high rate of turnover, with as much as 38 per cent of CWSE enrolments withdrawing during Semester I of 2009. The real issue, though, is to do with the limited scale of participation. Given that many hundreds of adults are not in the labour force, the relatively small numbers involved in training means that the vast majority have no effective access to adult education. Even if we restrict the analysis to those under 35 years, the scale of need appears to be way beyond current levels and modes of delivery.

Responsibility for processing local job-seekers and providing for their education and training now falls to the TDC as a member of the national Job Futures group. In August 2009, Job Futures at Wadeye had a total of 613 local Indigenous adults registered as job-seekers. A further 200 on CDEP who had yet to be registered suggested an overall case load in excess of 800—a scale of demand that matches the demographic and labour force analyses already presented. All of these job-seekers were classified as from a culturally and linguistically diverse background, with English often as a third or fourth language and very low rates of previous work experience thus flagging the need for customised programs and modes of delivery for vocational and non-vocational assistance. Of interest here is the fact that very few of these registered job-seekers (46, or 9.2% of the total case load) fall into Stream 4 of the Job Services Guarantee and have entered a Work Experience phase, although a target of increasing this by 30 individuals per month has been set, at least initially. For the most part, then, the provision of Stream 1 services based around pre-vocational programs will predominate.

The COAG National Indigenous Reform agenda has set some very precise targets with regard to adult education. One of these seeks to halve the percentage of those aged 20–64 without qualifications at Certificate level III by 2019. What does this imply at Wadeye? First of all, there are no reliable and comprehensive data on the level and nature of post-school qualifications held by adults in the Thamarrurr region. The source best suited to achieving such coverage is the ABS census, but in 2006 this reported just 12 adults with Certificates III and IV, and only four with Certificate levels I and II. Data quality here is not assisted by very high rates of non-response. As a consequence, there remains no reliable measure of the degree of skills accreditation in the region. However, at the Certificate III level and above it is almost certain that the 2006 data are reasonably accurate. That being the case, using the Series 1 population projection, we can calculate that it will be necessary for an additional 728 individuals to have Certificate III

**Table 12. Participations and completions in VET courses at Wadeye, 2008**

Qualification level	16–34 years		35+ years	
	Participations	Completions	Participations	Completions
Diploma	2	1	1	0
Certificate III	58	4	41	0
Certificate II	42	0	28	0
Certificate I	65	6	36	0
Sub-total	167	11	106	0
Statement of attainment	142	106	115	83

Source: Administrative data supplied by NTDET, Darwin.

qualification in 10 years time in order to achieve the stated COAG target. Table 12 shows that this target is way beyond reach at Wadeye given current levels of VET completion.

During 2008, a total of 270 participations in Certificate-level VET courses were recorded at Wadeye, and three at Diploma level. While these enrolments can include individual participants recorded more than once, this is unlikely for single-year data. It is more likely, though, for the data on Statements of Attainment, as these refer to much shorter courses. The main courses involved at Diploma and Certificate levels were conservation and land management, sport (athlete support services), Indigenous education work, children's services, civil construction, general construction, hospitality (kitchen operations), spoken and written English, and general education for adults. As for courses providing a Statement of Attainment, these were mostly driver licence, learner driver permit, and first aid courses.

For a sense of the significance of these data in relation to the size of the need for adult education, it is useful to return to Tables 9 and 10 on labour force status by age group. While the VET data do not indicate the labour force status of participants, it is known that many of those doing VET courses, especially at Certificate level, are already in work or on CDEP. For the most part, then, those who are not in the labour force are unlikely to be represented in Table 12. While this latter table shows up to 142 young adults in Certificate-level courses in 2008, this has to be considered in light of the fact that fully 626 young adults were not in the labour force, as indicated in Table 9. Once again, the participation-to-need ratio appears much more favourable among older adults, with as many as 115 Certificate-level participants from this age group, and only 204 altogether not in the labour force. Clearly, there remains substantial unmet need for adult education, especially among younger adults aged 16–34. However, even if participation were much higher, the more striking feature of Table 12 is the very low number of completions—just 11 at Certificate level in 2008 (as indicated in Table 10). Clearly, a major investment in adult education is required, both to

raise the level of participation, and to achieve higher rates of completion if there is to be any chance of meeting the particular target set by COAG for achievement in this area.

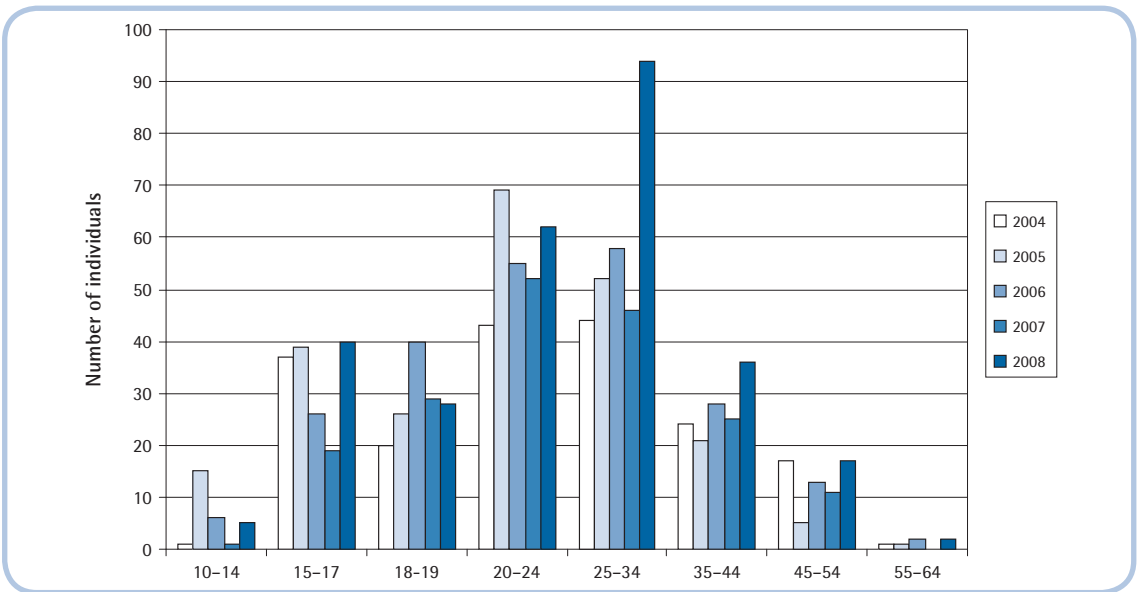
Presently, the opportunity for adults who have left formal schooling to pursue such aspirations is severely limited by a lack of adult education services. Consideration should therefore be given to the construction of an entirely new facility that can meet all community needs for literacy, numeracy, self-help and vocational training, in line with recommendations that have previously been made for the establishment of Indigenous learning communities (Schwab & Sutherland 2001), whilst recognising that needs will be highly varied (Kral & Schwab 2003).

## PARTICIPATION AND CRIMINAL JUSTICE

One factor that impacts on the pattern of labour force participation by age is the high level of interaction with police, and subsequently with the courts and various custodial institutions, that has become pervasive among younger people (mostly under 35 years of age) at Wadeye. In 2003, Wadeye had the highest per capita juvenile offending rate in the Northern Territory (Taylor 2004). While recidivism in the region is frequently portrayed as a measure of social dysfunction, precisely how dysfunction might be defined and explained in this particular cultural setting is only just beginning to be understood. However it is clear that the issues are more complex and culturally bound than a simple model of low socioeconomic status leading to social dysfunction would suggest (Ivory 2003, 2008), and there may also be important links to exclusion from schooling (Beresford 2003: 204–5). Whatever the underlying causes, the fact is that individuals frequently transgress the criminal code, and this affects their chances of sustained economic participation (Hunter & Borland 1999), to say nothing about disruptions to others who feel the effect of these transgressions.

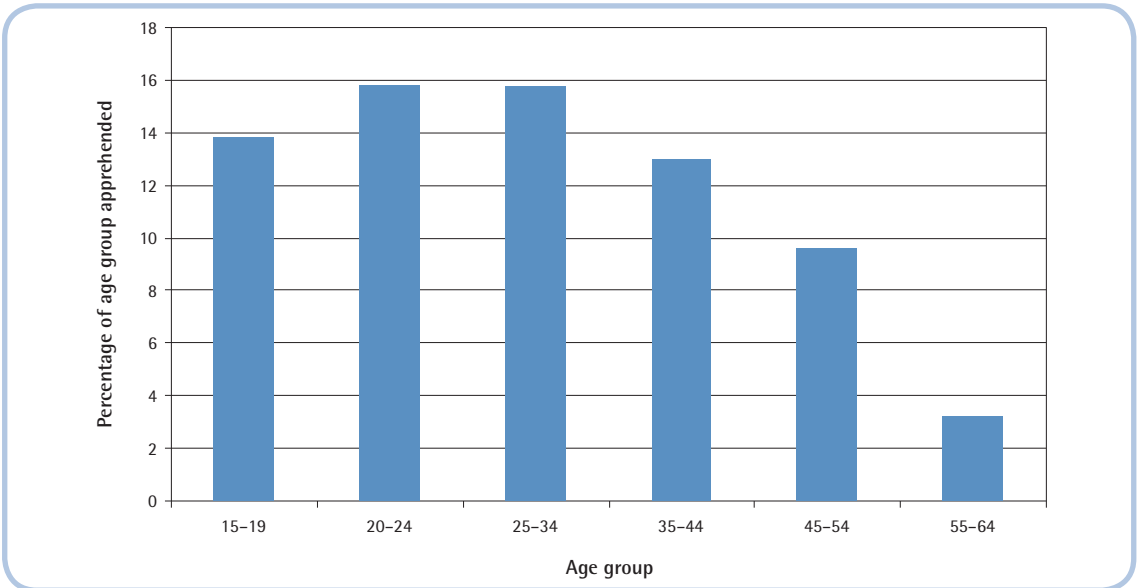
In 2008, most offences recorded in the Thamarrurr region were traffic and vehicle offences (267), followed by public order offences (174), property offences (141), and offences against the person (81). Many of these property offences are perpetrated against school infrastructure; over the 12 months from April 2008 a total of 21 break-and-enter incidents and acts of vandalism were reported at the school, some involving extensive damage. It is also the case that the public order and assault cases are an indicator of more endemic disruption to community life. This disruption both chronically, and periodically completely, undermines attempts by the school and the community at large to achieve the sort of attendance levels that are necessary for successful education outcomes. Extreme examples of this involve occasional school closure or mass evacuation of families to rural homelands.

**Fig. 21. Apprehensions in the Thamarrurr region by age group, 2004–08**



Source: Administrative data supplied by Northern Territory Department of Justice.

**Fig. 22. Apprehension rates in the Thamarrurr region by age group, 2008**



Source: Administrative data supplied by Northern Territory Department of Justice.

As for the apprehension of alleged offenders, this refers to individuals who have been arrested or summoned to face court at least once during a given year. On average between 2004 and 2008, there were 222 apprehensions each year, with the highest number (284) recorded in 2008. These involved an average of 155 distinct persons each year, and again the highest number of distinct persons apprehended (190) was in 2008. Fig. 21 shows the age distribution of apprehensions for each year. It is clear that most of these occurred among those aged 20–24 and 25–34, with a substantial peak among the latter age group in 2008. In fact, 2008 represented a peak for most age groups, suggesting that the provision of extra policing at Wadeye following the Northern Territory Emergency Response may well have been a factor.

If we consider the actual number of individuals apprehended in the peak year of 2008, the group aged 25–34 dominates once again, with numbers generally high up to 34 years of age and falling quite rapidly thereafter. However, what matters more is the rate of apprehension at different ages, as shown in Fig. 22. These rates are consistently highest from the age of 15 through to 34, at between 14 and 16 per cent of each age group. Even the group aged 35–44 shows a relatively high rate, but this drops notably at older ages. In other words, almost one-fifth of young adults between the ages of 20 and 34 were arrested or summoned to face court at least once during 2008, and older teenagers were not far behind.

Not surprisingly, given these levels of apprehension, there are several individuals from the Thamarrurr region who are incarcerated in Darwin corrective institutions at any one time. These numbers have been fairly stable in recent years, involving around 10 per cent of adults aged under 30 (almost all male) at any one time. Many of these are repeat offenders, and while custody rates decline with age, there is a group of juvenile offenders feeding into this cycle, and even more children of primary school age, who essentially experience an apprehension-free apprenticeship into recidivist behaviour. Not that sanction by the criminal justice system appears to matter much as a deterrent—indeed it may even be sought (Olgilvie & Van Zyl 2001). These statistics provide a stark indicator of the underlying social obstacles faced in achieving education and employment outcomes at Wadeye, and they suggest that a priority task should be to examine ways of engaging recidivist elements in the community, especially those of younger age.

## CONCLUSION

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In terms of social and economic development, Wadeye and its region sit very much at a crossroads. Recently designated as a 'growth town' and due, as such, for significant infrastructure and program investment under both COAG and Northern Territory Government strategies, the gap between incipient urban status and available services seems finally to be recognised, although much remains to be done by way of a response, especially in areas such as housing and regional roads. At the same time there is dynamism in the population with momentum for growth in working-age numbers that will shift the demographic balance substantially in favour of potential producers over consumers, but only if the burden of adult welfare dependency can be lifted. If not, then dependency is likely to become chronically entrenched.

In this equation, while schooling and adult education are vital inputs, their performance to date helps to explain a large part of the current predicament. From a demographic perspective, in terms of cohort progression and the inter-generational transfer of social norms, the high level of disengagement from schooling represents an educational free-fall that is in danger of reaching a point of no return. While restitution of adequate and equitable resourcing is clearly one element of a response to this looming crisis, and appears now to be partly underway, another element should focus on the role of parents, families and local officials if ambitions for schooling are to be realised (Sutton 2001: 141).

The bottom line is that outcomes from education have left the people of Wadeye and surrounds poorly positioned to benefit from any economic opportunities that might arise from enhanced urban status and connections to the wider economy. While employment growth has been substantial in recent years (albeit from a low base), one of the starker findings is that older adults are the ones who have benefited most by successfully acquiring whatever jobs are available, whereas younger adults have trailed behind for relative lack of aptitude and basic skills in literacy and numeracy. Nor is the prognosis any better for even younger cohorts. Of greatest concern for longer-term social and economic development at Wadeye is the current level of school truancy. While precise measurement is complicated by student mobility, barely one-fifth of those consistently enrolled at OLSHTCS can be classified as regular attendees. In addition, there are large numbers of intermittent enrollees who attend occasionally, and some 200 in the region who are not enrolled at all, at least not at OLSHTCS.

These figures suggest that non-attendance at school has become the social norm for compulsory school-age children, a transformation that has built up gradually since the days of mission schooling. As a consequence, educational needs at Wadeye are now two-fold: to ensure that school attendance once again becomes accepted and normal practice, and to ensure that those who have left school with little experience of it have every opportunity for remedial action. As a response, while the role of government in delivering adequate educational services remains undoubtedly crucial, it cannot be sufficiently emphasised that school attendance (or the lack of it) is fundamentally an issue for parents and the community at large and that families are the appropriate vehicles for socialisation of disengaged youth and adults. Consequently, a key role in building

impetus for educational re-engagement and progress must be acknowledged and supported for those in the region who hold authority in the social realm. In the contemporary institutional setting, this refers to Thamarrurr Incorporated (Desmarchelier 2000, 2001).

While the situation at Wadeye no doubt reflects circumstances of colonial history and contemporary state relations that are particular to that region, macro-demographic trends suggest that the dynamics of population change revealed in this single case would almost certainly be repeated in similar such towns and regions across remote Australia. To the extent that this is so, even if the experience of chronic withdrawal from school participation is only partially manifest elsewhere (and available evidence would suggest that this is so—see Gray & Partington 2003), then the burgeoning working-age population that is emerging from demographic transition presents a very substantial social policy challenge that could reverberate for decades to come if not urgently addressed. As at Wadeye, the immediate challenge, aside from restoring school participation, is how to meaningfully engage the substantial numbers who have passed beyond school-age with limited formal education.

## REFERENCES

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- Ah Kit, J. 2004. 'Why do we always plan for the past? Engaging Aboriginal people in regional development', Paper presented at the *Sustainable Economic Growth for Regional Australia 8th National Conference*, 7 September 2004, Alice Springs.
- Altman, J.C. 2001. 'Sustainable development options on Aboriginal land: The hybrid economy in the twenty-first century', *CAEPR Discussion Paper No. 226*, CAEPR, ANU, Canberra, available at <<http://www.anu.edu.au/caepr/discussion.php>>.
- Australian Bureau of Statistics (ABS) 2007. *Births 2006*, cat. no. 3301.0, ABS, Canberra.
- 2009a. *Experimental Life Tables for Aboriginal and Torres Strait Islander Australians, 2005–2007*, cat. no. 3302.0.55.003, ABS, Canberra.
- 2009b. *Labour Force 2009*, cat no. 6202.0, ABS, Canberra.
- Beresford, Q. 2003. 'Crime, justice and Aboriginal youth', in Q. Beresford and G. Partington (eds), *Reform and Resistance in Aboriginal Education*, University of Western Australia Press, Nedlands.
- Biddle, N. and Taylor, J. 2009. 'Indigenous population projections 2006–2031: Planning for growth', *CAEPR Working Paper No. 56*, CAEPR, ANU, Canberra, available at <<http://www.anu.edu.au/caepr/working.php>>.
- Biddle, N., Taylor, J. and Yap, M. 2009. 'Which gap to close? Regional trends and forecasts of Indigenous employment', *Australian Journal of Labour Economics*, 12 (3): 263–81.
- Bloom, D.E. and Williamson, J.G. 1998. 'Demographic transitions and economic miracles in emerging Asia', *World Bank Economic Review*, 12: 419–65.
- Commonwealth of Australia 2002. *Intergenerational Report 2002–03, 2002–03 Budget Paper No. 5*, Circulated by the Honourable Peter Costello MP, Treasurer of the Commonwealth of Australia, for the Information of Honourable Members on the Occasion of the Budget 2002–03, 14 May 2002, Parliament House, Canberra.
- 2004. *Australia's Demographic Challenges*, Department of the Treasury, Canberra.
- 2007. *Intergenerational Report 2007*, Circulated by the Honourable Peter Costello MP, Treasurer of the Commonwealth of Australia, April 2007, Department of the Treasury, Canberra.
- 2010. *Australia to 2050: Future Challenges*, Circulated by the Honourable Wayne Swan MP, Treasurer of the Commonwealth of Australia, January 2010, Department of the Treasury, Canberra.

- Desmarchelier, X. 2000. 'A historical and cultural overview to the re-emergence of Thamarrurr: A traditional form of governance for the people of Wadeye', Unpublished manuscript prepared for the people of Wadeye on behalf of Thamarrurr Inc., Wadeye.
- 2001. *A Historical and Cultural Overview to the Re-emergence of Thamarrurr: A Traditional Form of Governance for the People of Wadeye*, MA thesis, University of South Australia, Adelaide.
- Gottfried, M.A. 2009. 'Evaluating the relationship between student attendance and achievement in urban elementary and middle schools: An instrumental variables approach', *American Educational Research Journal* (published online November 2009).
- Gray, A. 1990. 'Aboriginal fertility: Trends and prospects', *Journal of the Australian Population Association*, 7 (1): 57–77.
- and Tesfaghiorghis, H. 1991. 'Social indicators of the Aboriginal population of Australia', *CAEPR Discussion Paper No. 18*, CAEPR, ANU, Canberra, available at <<http://www.anu.edu.au/caepr/discussion.php>>.
- Gray, B. 2006. 'Council of Australian Governments (COAG) trial evaluation: Wadeye, Northern Territory, independent evaluation', WJG & Associates Pty Ltd.
- Gray, J. and Partington, G. 2003. 'Attendance and non-attendance at school', in Q. Beresford and G. Partington (eds), *Reform and Resistance in Aboriginal Education*, University of Western Australia Press, Nedlands.
- Hunter, B. and Borland, J. 1999. 'The effect of arrest on Aboriginal employment prospects', *Crime and Justice Bulletin No. 45*, NSW Bureau of Crime Statistics and Research, NSW Department of Justice and Attorney General, Sydney.
- Ireland, S. 2009. *Niyith Niyith Watmam, The Quiet Story: Exploring the Experiences of Aboriginal Women Who Give Birth in a Remote Community in the Northern Territory*, BSc thesis, Charles Darwin University, Darwin.
- Ivory, B. 2003. *Nemarluk to Heavy Metal: Cultural Change and the Development of Contemporary Youth Sub-culture at Port Keats, Northern Territory*, BA Hons thesis, CDU, Darwin.
- 2008. 'Indigenous leaders and leadership: Agents of networked governance', in J. Hunt, D. Smith, S. Garling and W. Sanders (eds), *Contested Governance: Culture, Power and Institutions in Indigenous Australia*, CAEPR Research Monograph No. 29, ANU E Press, Canberra, available at <<http://www.anu.edu.au/caepr/mono.php>>.
- Jackson, N. 2008. 'Educational attainment and the (growing) importance of age structure: Indigenous and non-Indigenous Australians', *Journal of Population Research*, 25 (2): 223–42.
- Johnstone, K. 2010. 'Indigenous birth rates: How reliable are they?', *People and Place*, 17 (4): 11–22.

- Kral, I. (forthcoming) 'Generational change, learning and remote Australian Indigenous youth', CAEPR Working Paper Series, CAEPR, ANU, Canberra.
- and Schwab, J. 2003. 'The realities of Indigenous adult literacy acquisition and practice: Implications for capacity development in remote communities', *CAEPR Discussion Paper No. 257*, CAEPR, ANU, Canberra, available at <<http://www.anu.edu.au/caepr/discussion.php>>.
- McCormack, D. 2006. 'The substance of Australia's first men', Paper presented to the National Mental Health and Homelessness Advisory Committee of St. Vincent de Paul Society, 20 July 2006, Darwin.
- Morphy, H. 2005. 'Indigenous art as economy', in D. Austin-Broos and G. Macdonald (eds), *Culture, Economy and Governance in Aboriginal Australia*, Sydney University Press, Sydney.
- Nganbe, T. 2007. 'Speech at the Opening of the New Secondary Campus at Our Lady of the Sacred Heart Thamarrurr Catholic School', Ngepan Kangkarlmawu Secondary Campus, OLSHTCS, Wadeye, 20 November 2007.
- and McCormack, D. 2009. 'A contextual analysis of education in the Thamarrurr region with a focus on Wadeye', unpublished manuscript, Bowden McCormack Lawyers & Advisors, Darwin, available at <<http://www.bowden-mccormack.com.au/index.php?page=tools-articles-and-papers>>.
- Northern Territory Department of Education and Training (NTDET) 1999. *Learning Lessons: An Independent Review of Indigenous Education in the Northern Territory*, NTDET, Darwin.
- Northern Territory Treasury 2004. *The Northern Territory's Response to Australia's Demographic Challenges Discussion Paper*, June 2004, Northern Territory Treasury, Darwin.
- Ogilvie, E. and Van Zyl, A. 2001. 'Young Indigenous males, custody and rites of passage', *Trends and Issues in Crime and Criminal Justice No. 204*, Australian Institute of Criminology, Canberra.
- Pye, J. 1973. *The Port Keats Story*, JR Coleman Printers, Darwin.
- Schwab, J. and Sutherland, D. 2001. 'Building Indigenous learning communities', *CAEPR Discussion Paper No. 225*, CAEPR, ANU, Canberra, available at <<http://www.anu.edu.au/caepr/discussion.php>>.
- Socom and Dodson Lane 2009. *Our Home, Our Homeland: Community Engagement Report*, Northern Territory Government, Darwin.
- Stanner, W.E.H. 1933. 'The Daly River tribes: A report of fieldwork in North Australia', *Oceania*, 3 (4): 377–405.
- 1969. *After the Dreaming: Black and White Australians—an Anthropologist's View*, 1968 Boyer Lectures, ABC, Sydney.
- Steering Committee for the Review of Government Service Provision 2009. *Overcoming Indigenous Disadvantage: Key Indicators 2009*, Productivity Commission, Canberra.

- Sutton, P. 2001. 'The politics of suffering: Indigenous policy in Australia since the 1970s', *Anthropological Forum*, 11: 125–73.
- Taylor, J. 2003. 'Indigenous Australians: The first transformation', in S.E. Khoo and P. McDonald (eds), *The Transformation of Australia's Population: 1970–2030*, UNSW Press, Sydney.
- 2004. *Social Indicators for Aboriginal Governance: Insights from the Thamarrurr Region, Northern Territory*, CAEPR Research Monograph No. 24, ANU E Press, Canberra, available at <<http://www.anu.edu.au/caepr/mono.php>>.
- 2007. 'Demography is destiny—except in the Northern Territory', in J.C. Altman and M. Hinkson (eds), *Coercive Reconciliation: Stabilise, Normalise, Exit Aboriginal Australia*, Arena Publications, Melbourne.
- 2008. 'Counting the cost: Stanner and the Port Keats population', in M. Hinkson and J. Beckett (eds), *An Appreciation of Difference: W.E.H. Stanner, Anthropology and Aboriginal Affairs*, Aboriginal Studies Press, Canberra.
- and Dermody, P. 2009. *A Strategic Assessment of Educational Needs in the Thamarrurr Region*, Report to the Australian Human Rights Commission Working Group on the Assessment of Education Needs at the OLSH Thamarrurr Catholic School, Wadeye, Department of Education, Employment and Workplace Relations, Canberra.
- and Hunter, B. 1998. *The Job Still Ahead: Economic Costs of Continuing Indigenous Employment Disparity*, Aboriginal and Torres Strait Islander Commission, Canberra.
- and Stanley, O. 2005. 'The opportunity costs of the status quo in the Thamarrurr region, Northern Territory', *CAEPR Working Paper No. 28*, CAEPR, ANU, Canberra, available at <<http://www.anu.edu.au/caepr/working.php>>.

