

APPENDICES

Appendix A: History of Indigenous policy and administrative affairs in Western Australia	595
Major policy developments	595
Developments in child and community welfare	597
Timeline of Aboriginal affairs in Western Australia	599
Endnotes	607
Appendix B: A guide to the survey fieldwork instruments	608
Content of the survey instruments	609
Appendix C: Determination of Levels of Relative Isolation (LORI) based on ARIA++	612
Introduction	612
ARIA Index	613
ARIA+ Index	613
ARIA++ Index	613
Development of categories for Level of Relative Isolation	614
Summary	617
Endnotes	617
Appendix D: Reliability of estimates	618
Measuring sampling error	618
Assessing statistical significance	618
Non-sampling errors	619
Appendix E: Satisfaction with community services and facilities — WAACHS and 1993 WA CHS	620
Appendix F: Western Australian Aboriginal communities maps	622





APPENDIX A: HISTORY OF INDIGENOUS POLICY AND ADMINISTRATIVE AFFAIRS IN WESTERN AUSTRALIA

The following is a summary of the major historical events and government legislative, administrative and policy changes affecting Aboriginal people, families and communities in Western Australia since colonisation. Western Australian State Government matters are the primary focus of this summary, although major Commonwealth (Australian Government) initiatives that impacted on Aboriginal affairs administration in Western Australia have also been discussed.

The information presented here (including the timeline of Aboriginal affairs in Western Australia) has been compiled from material provided by the Western Australian Departments of Indigenous Affairs and Community Development,^{1,2} and the report of the Task Force on Aboriginal Social Justice.³

MAJOR POLICY DEVELOPMENTS

It has been argued extensively that the past policies directed toward Aboriginal people in Australia have generated intergenerational social and economic disadvantage.⁴ There have been several landmark decisions and actions that have shaped the living circumstances of Aboriginal people since colonisation.

Early colonial policies and attitudes

Most of the policies formulated in the early, post-colonisation period that related to Aboriginal people in Western Australia had an underlying theme of restriction. This, and the prevailing attitudes of European settlers, prevented Aboriginal people from participating and developing economically, socially and culturally as citizens of Australia.³ The various restrictions placed on Aboriginal people, while gradually removed over time, still formed part of official policy into the second half of the twentieth century.

Aboriginal policies in the nineteenth century tended to be consistent with a belief that European culture was superior and more civilised, and should be imposed on the native people for their benefit. As such, policies throughout this period were generally concerned with providing Christianity and civilisation, providing Aboriginal people with the same status and legal rights as those of British subjects, and protecting the wellbeing of the Aboriginal people.³

At the beginning of the twentieth century, the *Aborigines Act* (1905) established a Chief Protector of Aboriginal people in Western Australia, who was the guardian of all Aboriginal children to the age of 16 years.⁵ The Chief Protector had the right to control the property and movements of Aboriginal people and enabled regulations to be made for the care, custody and education of the children of Aborigines and 'half-castes' and legalised removal of any Aboriginal or 'half caste' child to an Aboriginal institution, industrial school or orphanage.⁶

In addition to missions established between 1890 and 1910, a number of 'native settlements' were created in Western Australia by the Chief Protector (A.O. Neville) between 1915 and 1940.⁶

The Western Australian Government (via the *Native Administration Act 1936*) changed the title of the Chief Protector to Commissioner of Native Affairs and made the commissioner the legal guardian of all Aboriginal children in the state until they



turned 21.⁵ The Commissioner remained the legal guardian of ‘native children’ (except where the child had been made a ward under the *Child Welfare Act 1947*) until the proclamation of the *Native Welfare Act 1963*.⁶ This *Act* outlined the duties of the state Department of Native Welfare to provide for ‘the custody, maintenance and education of the children of natives’ and to assist in the ‘economic and social assimilation by the community’ of ‘natives’.⁶

The policies of racial assimilation were effectively responsible for the practice of forcibly removing children from their families and placing them in missions or institutions. As a result, there was a large number of Aboriginal children in Christian missions and institutions in Western Australia throughout the 1940s to 1970s. It has been well documented that the experiences of Aboriginal children in these institutions was far from ideal, with very little attention given to Aboriginal culture and languages.

The 1967 Referendum and beyond

The 1967 Referendum marked an important shift in the way government responsibilities for Aboriginal affairs were aligned, and coincided with a greater investment in formulating policies specifically geared toward improving the social and economic circumstances of Aboriginal people in Australia. Accordingly, the prevailing philosophies underpinning policy development at the time and in previous decades — that is, the beliefs that Aboriginal people should generally be excluded and segregated from mainstream white society — were gradually replaced with attitudes reflecting greater cultural inclusiveness.⁷

Prior to the Referendum, state and territory governments had sole responsibility for Aboriginal affairs, so the policies for Aboriginal people differed between Western Australia and other parts of Australia. However, the Referendum provided the Commonwealth Government with the power to legislate on issues directly affecting Aboriginal people and provided for a better alignment of policy initiatives across states and territories.

The abolition of the state Department of Native Welfare in 1972 and the transfer of their welfare responsibilities to the state Department of Community Welfare was an important step in alleviating the systemic discrimination toward Aboriginal people and improving self-determination. At the time, over 3,000 Aboriginal people in Western Australia, or around one in ten, were in institutions.

The current paradigm

In recent decades there have been a number of inquiries, at both the state and federal level, which have highlighted the considerable disparities between Aboriginal and non-Aboriginal people in most areas of social and economic concern. Key inquiries, such as those documented in the Gordon report (focusing on family violence and child abuse in Aboriginal communities)⁸, the *Bringing Them Home* report (detailing the impact of the practice of forced separation of Aboriginal children from their families),⁶ and the report of the *Royal Commission into Aboriginal Deaths in Custody*,⁹ have highlighted that many serious problems were endemic with little or no measurable improvement in years prior.

The Council of Australian Governments (COAG) has recently agreed to a framework for monitoring the disparities in outcomes between Aboriginal and non-Aboriginal people — known as the Overcoming Indigenous Disadvantage reporting framework.



This framework is designed to be used as a tool to measure progress and provide a positive strategic focus for policy and service delivery.⁴ More recently, COAG made a generational commitment to overcome the prevailing disadvantage faced by Aboriginal Australians, acknowledging that the reform agenda must reflect the diversity of the Aboriginal circumstance, and focus on actions which have the greatest capacity to benefit Aboriginal peoples.¹¹

The current paradigm for Aboriginal affairs in Australia recognises that self-determination and a holistic approach to policy and programme development are pivotal requirements for reducing Aboriginal disadvantage. These theories are part of the rationale for recent changes to the structure of Aboriginal affairs at the national level¹⁰, which include the formation of the Office of Indigenous Policy Coordination (OIPC). The OIPC aims to ensure a whole-of-government approach to policy development, while managing a network of Indigenous Coordination Centres for the effective delivery of programmes and services throughout the states and territories.

DEVELOPMENTS IN CHILD AND COMMUNITY WELFARE

Providing services for children in need of care

Western Australia's state Children's Department was established by the *State Children's Act 1907*, with a secretary having power over the care, management and control of all 'state' children.⁶ The *Act* transferred the payment of foster parents to the state, outlawing private fostering arrangements, and provided for the establishment of children's courts and for the boarding out of children in private homes.⁵

The name of the department was changed to Child Welfare Department in 1927 and developed into a full-time portfolio (under the control of its own minister) in 1934. With the proclamation of the *Child Welfare Act* in 1947, courts were able to commit children to the care of the department where they found a child to be destitute or neglected.⁶

From 1951, Aboriginal children were more likely to be removed under the *Child Welfare Act 1947* by the Child Welfare Department than by the Department of Native Welfare acting under the 1936 *Act*. This practice was formalised when the *Native Welfare Act 1954* was passed, revoking the removal power of the Commissioner for Native Affairs. The Commissioner remained the legal guardian of all Aboriginal children except state wards until the *Native Welfare Act 1963* was passed.⁶

The child welfare legislation required a court to be satisfied that the child was destitute or neglected. However, the definition of destitution applied to the situation of many Aboriginal families with few material resources. Aboriginal families who had moved to towns and cities following the closure of some of the missions and settlements and had to re-establish themselves were particularly vulnerable to action under the 1947 *Act*.⁶

In 1961, the *Welfare and Assistance Act* empowered the Department to make monetary payments to persons in distress and having the care of children. In 1967, an amending bill was passed which allowed parents who were having difficulty managing their child to apply to the Minister for the committal of that child to the Department for a specified time only, to receive appropriate treatment or advice.

A Community Welfare portfolio was created in 1971 and work began on the *Community Welfare Bill* and the amalgamation with sections of the Native Welfare Department.⁶



Shifting focus to community welfare

The *Community Services Act 1972* established the Department for Community Welfare, amalgamating the Child Welfare and Native Welfare Departments.⁵ Around this time, a child placement service was set up to oversee children who lived apart from their families in foster homes, group homes, hostels, boarding houses and residential facilities.

The *Child Welfare Act 1947* was amended in 1976 to repeal 'destitution' and 'neglect' as grounds for removal and to introduce the concept of being 'in need of care and protection'. Despite this, Aboriginal children remained over-represented in the state care system.⁶

In 1985 a new approach was adopted, which promoted self-sufficiency with a focus on services that were preventative, accessible, local and participatory. With it, there was a shift from institutional care to a greater emphasis on community-based programmes and services. The restrictions which prohibited local government authorities from being involved in welfare services were removed.⁵

The Aboriginal Child Placement principle was developed in 1984 to enable placement policies to be responsive to the cultural needs of Aboriginal children. The aim of this principle was to ensure Aboriginal children who were taken into care were appropriately placed within their immediate or extended family, local Aboriginal community or wider Aboriginal community, so as to maintain connection with family and culture. A 1989 review highlighted that there had been a 58 per cent reduction over the previous five years in the number of Aboriginal children in departmentally subsidised foster care, with most Aboriginal children being placed with Aboriginal caregivers (mostly relatives).⁶

Recent catalysts for change

In 1997, *Bringing Them Home: Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families* was tabled in the federal parliament. As part of the State Government's response to this report, funds were allocated to operate a central service to help Aboriginal people access family information held by government agencies.

The state government's Machinery of Government Taskforce undertook public sector reforms in 2001, which led to the creation of the Department for Community Development (DCD) in July 2001. The recommendations of the Machinery of Government Report shifted DCD's strategic directions, from a predominant focus on the provision of welfare and safety-net services in response to problems, to a greater emphasis on building the capacities and strengths of individuals, families and communities, allowing them to shape their own lives positively. DCD's work was subsequently based on four key principles — engagement, inclusiveness, cooperation/collaboration and capacity building, which form the basis from which communities are developed and services are delivered to individuals, families and communities.¹²

In 2002, the Government of Western Australia received the Gordon Inquiry — *Putting the Picture Together: Inquiry in Response by Government Agencies to Complaints of Family Violence and Child Abuse in Aboriginal Communities*. The inquiry identified the need for collaborative and holistic responses to address child abuse and family violence issues in Aboriginal communities.



New legislation — *The Children and Community Services Act 2005* — was proclaimed in March 2006. The *Act* increased DCD's accountability and transparency in its responses to families in the case of concern for a child's wellbeing, its responsibility for children in its care, and incorporated the Aboriginal and Torres Strait Islander Child Placement Principle.¹³

Visions for the future of community development

DCD's Aboriginal and Torres Strait Islander Strategic Plan for 2004 to 2009, titled *Indigenous Vision*, provides a framework for the way the department works with Aboriginal and Torres Strait Islander children, young people, women, men, Elders and communities. It was developed in collaboration with the department's Aboriginal and Torres Strait Islander staff, Aboriginal and Torres Strait Islander leaders, stakeholders and the community.²

The desired outcomes of the Strategic Plan reflect themes of community and country, care, relationships, partnerships and engagement. Within this, the five outcome areas are specified: safety and capacity building; cultural awareness; Aboriginal staff development; developing and engaging young people; and developing individuals, families and communities.

TIMELINE OF ABORIGINAL AFFAIRS IN WESTERN AUSTRALIA

The following timeline refers primarily to Western Australian State Government policy and administrative developments since colonisation, although major Commonwealth (Australian Government) initiatives are included where they impacted on the administration of Aboriginal affairs in Western Australia.

1829	Colonisation of Western Australia by the British. The welfare of Aboriginal people came under the direct responsibility of the Colonial Secretary.
1830	Aboriginal Protectors appointed.
1832	Superintendent of Tribes appointed to assist the Colonial Secretary.
1840	Colonial Government issues direction that Aboriginal people should not be admitted to towns.
1854	Role of Protectors temporarily abolished.
1880	An Act passed which prohibited the supply of liquor to Aboriginal people and the loitering of Aboriginal people in licensed premises.
1883	Royal Commission established to inquire into the treatment of Aboriginal prisoners — the Forrest Report.



1886	Aborigines Protection Board established under the <i>Aborigines Protection Act</i> to provide Aboriginal people with food and clothing when destitute, assist in their preservation and wellbeing, and provide for the education of Aboriginal children. The <i>Act</i> enabled regulation and control over the entire population of Aboriginal people in Western Australia.
1889	Section 70 introduced into the Constitution providing for one per cent of gross revenue to be appropriated to the welfare of Aboriginal natives.
1890	Western Australia attains self-government, although British Government continues to maintain control over Aboriginal affairs.
1898	Aboriginal Protection Board replaced by the Aborigines Department under a Chief Protector of Aborigines.
1904	Royal Commission into Aboriginal matters. The report found many abuses of Aboriginal people and their rights, and recommended their protection by strict controls.
1905	<i>Aborigines Act</i> (1905) enacted. This gave the Chief Protector the statutory power to institute measures for the relief, protection and control of Aboriginal people as recommended by the Royal Commission. The <i>Act</i> legalised the removal of Aboriginal children from their natural families, encouraged establishment of reserves and missions, and introduced many restrictive measures.
1915	Appointment of Mr A.O. Neville as Chief Protector of Aborigines. Neville was in charge of the various departments responsible for Aboriginal Affairs until his retirement in 1940.
1920	Responsibility for Aboriginal affairs was divided. The Department for the North West was responsible for Aboriginal people living above the 25th parallel and the Department of Aborigines and Fisheries for those below the 25th parallel.
1926	The Aborigines Department was re-established and became responsible for Aboriginal matters throughout the State.
1934	Royal Commission into Aboriginal Affairs established. The Commission inquired into the social and economic conditions of Aboriginal people, the law relating to Aboriginal people, the administration of the Aborigines Department, and the specific allegations of ill treatment of Aboriginal people.



1936	As a result of the recommendations of the Royal Commission, the <i>Aborigines Act</i> was amended and became the <i>Native Administration Act</i> (1936). The Aborigines Department became Department of Native Affairs headed by a Commissioner for Native Affairs.
	The amendment incorporated the recommendations of the Royal Commission which resulted in greater control of the Aboriginal population, including: the imposition of penalties for actions which were not an offence for 'non-Aboriginals'; the placement of children of Aboriginal people under the guardianship of the Commissioner; and the imposition of a permit system for entry into certain towns and for employment.
1937	First conference of Commonwealth and state bodies concerned with Aboriginal matters held in Canberra.
1944	<i>Native (Citizenship Rights) Act</i> gave limited rights to Aboriginal people who could prove, among other things, that they had adopted a 'civilised life' and did not associate with Aboriginal people who did not have citizenship rights. Such 'citizenship,' however, could be withdrawn at any time.
1947	The Bateman Report showed the deplorable conditions in which the Aboriginal population was living and advocated the abandonment of past protective measures in favour of a long term policy of positive welfare, and supported the assimilation of Aboriginal people into the general community. The report resulted in the decentralisation of the Aborigines Department.
1954	<i>Native Administration Act</i> replaced by the <i>Native Welfare Act</i> , which repealed many of the strict controls and handouts featured in the previous <i>Act</i> . The Department's name changed to the Department of Native Welfare.
1959	Commonwealth <i>Social Service Act</i> amended to permit social service benefits to all Aboriginal people.
1962	Aboriginal people became eligible to vote in Western Australian elections, although voting was not compulsory.
1963	Slow but progressive liberalisation of the regulations affecting Aboriginal people culminated in the amendment of the <i>Native Welfare Act</i> in which the last restrictive provisions were removed. Some places in the North West, however, were still entitled to restrict the movements of Aboriginal people and refuse to supply liquor (these clauses were repealed in 1972).



1967	Commonwealth Referendum provided the Commonwealth Government with the power to legislate in relation to Aboriginal matters. Aboriginal people to be included in all future censuses.
1968	Formation of the Australian Aboriginal Affairs Council (AAAC) comprising Commonwealth, state and territory ministers with responsibility for Aboriginal Affairs.
1972	<p>Repeal of the <i>Native Welfare Act</i> and the enactment of the <i>Aboriginal Affairs Planning Authority (AAPA) Act</i>. The Department of Native Welfare was abolished and replaced by the Aboriginal Affairs Planning Authority, with some of its functions taken over by the newly created Department of Community Welfare. Rather than having a single department with overriding responsibilities, housing, health, education, employment and welfare programmes were channelled to departments such as the State Housing Commission and the Public Health Department.</p> <p>The AAPA was established to retain the policy planning, coordination, ministerial advice and land management roles of the defunct Native Welfare Department. In addition, it provided administrative support to three statutory bodies: the Aboriginal Lands Trust, the Aboriginal Advisory Council and the Aboriginal Affairs Co-ordinating Committee. For the first time, a statutory mechanism was in place for Aboriginal people to be involved in government decision-making processes.</p> <p>The <i>Aboriginal Heritage Act</i> enacted giving the Western Australian Museum, through the Department of Aboriginal Sites, the responsibility to protect places and objects of significance to Aboriginal people.</p>
1973	<p>Royal Commission into all matters affecting the wellbeing of Aboriginal people in Western Australia affirms the existing policy of consultation and Aboriginal involvement in decision-making and that Aboriginal communities should be self-managing and able to choose their own manner of living. The report also recommends that tribal Aboriginal identity should be preserved while assisting the integration of non-tribal Aboriginals.</p> <p>National Aboriginal Consultative Committee (NACC) established.</p>
1974	The federal government takes on greater responsibility for Aboriginal affairs throughout Australia. As a consequence, the <i>AAPA Act</i> is amended, with the Commonwealth becoming responsible for the administration of the <i>Act</i> .
1977	National Aboriginal Conference established as a result of a restructure of the NACC. This established the first Aboriginal elected body with direct access to government.



1979	<i>Aboriginal Communities Act</i> was proclaimed, allowing certain Aboriginal communities to manage and control community affairs.
1984	AAPA became independent of the Commonwealth Department of Aboriginal Affairs. The AAPA also became responsible for administering the <i>Aboriginal Communities Act 1979</i> . This <i>Act</i> aimed to assist Aboriginal communities to manage and control their community lands.
1986	For the first time since 1972, a separate Aboriginal Affairs portfolio was created in Western Australia. The Hon. Ernie Bridge MLA became the first Aboriginal Member of Parliament to be appointed to Cabinet when he became Minister for Aboriginal Affairs. Ms Sue Lundberg was appointed Commissioner for Aboriginal Planning, thereby becoming the first Aboriginal person to head a state department in Western Australia. Following the failure of the <i>Aboriginal Land Bill</i> in 1985 and the Commonwealth Government's decision not to introduce uniform land rights legislation, the state and Commonwealth Governments entered into an agreement in support of land initiatives within the terms of existing legislation. \$100m was allocated over five years (\$10m per year per government) for the <i>Aboriginal Communities Development Program (ACDP)</i> .
1987	Royal Commission into Aboriginal Deaths in Custody was established jointly by the Commonwealth, state and territory governments. The Commission investigated the deaths of 99 Aboriginal and Torres Strait Islander people in the custody of police, in prison or in juvenile detention institutions between 1 January 1980 and 31 May 1989. The Commonwealth Government launched the Aboriginal Employment Development Policy to assist Aboriginal people to achieve equity with other Australians in terms of employment and economic status. The policy was established to promote Aboriginal economic independence from government and to reduce Aboriginal dependency on welfare in accordance with their traditions, chosen way of life and cultural identity.
1989	State Cabinet approved the establishment of a Cabinet Sub-Committee on Aboriginal Affairs.
1990	The Aboriginal and Torres Strait Islander Commission (ATSIC) commenced official operation on 6 March.



1991	<p>Inquiry into Service and Resource Provision to Remote Communities examined the delivery of services in remote areas and highlighted the need to improve communication systems, planning and coordination for better safety and emergency situations for remote communities.</p>
	<p>Both houses of federal parliament unanimously passed the <i>Council for Aboriginal Reconciliation Act</i> establishing a Council of 25 members.</p>
1992	<p>Commonwealth and state governments tabled a cooperative National Response and individual state responses to the recommendations of the Royal Commission into Aboriginal Deaths in Custody. The Western Australian State Government indicated its full, qualified or in principle support to all 339 recommendations.</p>
	<p>An Aboriginal Women's Taskforce was formed as a reference group to the Aboriginal Advisory Council to provide advice to the AAPA and to the Minister on matters affecting Aboriginal women and families.</p>
	<p>The High Court handed down its decision in the <i>Mabo versus Queensland</i> case. The decision rejected the doctrine that Australia was 'terra nullius' (land belonging to no-one) at the time of settlement.</p>
	<p>The Council of Australian Governments (COAG) endorsed a National Commitment to Improved Outcomes in the Delivery of Programs and Services for Aboriginal Peoples and Torres Strait Islanders. This provided a framework for coordinated inter-government action to redress Aboriginal inequality and disadvantage. Bilateral agreements between governments now formed the basis of programmes and service delivery.</p>
1993	<p>The 'Aboriginal Plan' was published. This was the first time a plan had been produced which provided a clear statement of state government programmes in Aboriginal affairs, listed the departments responsible for them and the financial resources provided for their implementation.</p>
	<p>The Task Force on Aboriginal Social Justice was established to review activities of government in relation to social conditions and the advancement of Aboriginal people.</p>
	<p>The <i>Land Titles and Traditional Usage Act</i> replaced native title with rights of traditional usage of Crown land and provided for a system of objection, appeal and/or compensation if those traditional usage rights were extinguished or interfered with through the granting of other forms of title to land.</p>
	<p>The Implementation Report of the Royal Commission into Aboriginal Deaths in Custody was tabled in state parliament. Western Australia is the only government to date that has tabled a formal and detailed progress report on the implementation of the Royal Commission's recommendations.</p>



1994 The Aboriginal Affairs Department (AAD) was created in response to the recommendations in the Report of the Task Force on Aboriginal Social Justice. It incorporated the roles of the former AAPA, the Department of Aboriginal Sites and the Office of Traditional Land Use. The Department's role in planning, target-setting and monitoring outcomes in Aboriginal Affairs across government was strengthened.

1995 The High Court of Australia handed down its decision on Native Title. As a result of this decision, the provisions of the *Land Titles and Traditional Usage Act* and sections of the *Mining and Lands Acts* relating to the rights of traditional usage become inoperative. Land and mining titles over most of Western Australia are now processed through the federal tribunal system.

The Human Rights and Equal Opportunity Commission (HREOC) launched its Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families.

The process of setting up regional Aboriginal Justice Councils commenced. The first were established in the Pilbara, the Goldfields and the Murchison/Gascoyne areas.

1997 The HREOC Inquiry released its report, entitled *Bringing Them Home: A Guide to the Finding and Recommendations of the National Inquiry into the Separation of Aboriginal and Torres Strait Island Children from their Families*.

1998 AAD restructured with two main roles: to assist Aboriginal people to access services and facilities available to the community at large; and to facilitate the coordination of the operations of mainstream agencies to ensure equitable access to their services by Aboriginal people in matters of land, heritage and culture.

Native Title Amendment Act 1998 was introduced and implemented the government's Ten Point Plan in response to the High Court's decision in the Wik Case.

May 26th – Sorry Day. This date was chosen as it was a year to the day since the tabling in Parliament of the HREOC report and it was the thirtieth Anniversary of the Referendum.

1999 Both houses of federal parliament adopt the 'Motion of Reconciliation' in which 'practical reconciliation' is articulated.

The remote Kimberley community of Pandanus Park made history when it became the first reserve to be handed over under the state government's *Land Transfer Program*.



2000	<p>COAG agrees on a 'Reconciliation Framework' to advance reconciliation and address Indigenous disadvantage through more coordinated action from governments, the private sector, non-government organisations, Indigenous communities and the wider community.</p>
2001	<p>Newly elected Kimberley MLA Carol Martin became the first Aboriginal woman in the Western Australian parliament.</p> <p>The AAD renamed as Department of Indigenous Affairs.</p> <p>The Statement of Commitment to a new and just relationship between the Government of Western Australia and Aboriginal Western Australians was signed. It articulated the principles under which the state government would engage with its Aboriginal citizens in addressing their needs and rights.</p>
2002	<p>Magistrate Sue Gordon submitted the report on the Inquiry Into The Government Response to Complaints on Family Violence and Child Abuse In Aboriginal Families entitled <i>Putting the Picture Together</i>.</p>
2004	<p>ATSIC abolished. Programmes formerly the responsibility of ATSIC are subsumed in mainstream agencies. The Office of Indigenous Policy Coordination (OIPC) is established, with programmes and services funded through the network of Indigenous Coordination Centres (ICCs) in urban, regional and rural Australia.</p> <p>Overcoming Indigenous Disadvantage (OID) framework endorsed by COAG.</p>
2005	<p>An Indigenous Land Use Agreement (ILUA) was negotiated for the central country zone of the Wheatbelt region. The ILUA provides for a comprehensive Aboriginal heritage management process as part of an alternative future Act regime under the <i>Native Title Act 1993</i>.</p>
2006	<p>COAG agrees to a long term, generational commitment to overcome Indigenous disadvantage and the importance of significantly closing the gap in outcomes between Indigenous people and other Australians in key areas for action as identified in the OID framework.</p> <p>Responsibility for Indigenous affairs at the national level transferred to Department of Families, Community Services and Indigenous Affairs.</p>



ENDNOTES

1. Department of Indigenous Affairs. Personal communication; 2006.
2. Department for Community Development, Policy Branch. Personal communication; 2006.
3. Task Force on Aboriginal Social Justice. *Report of the Taskforce*. Perth: Government of Western Australia; 1994.
4. Department of Indigenous Affairs. *Overcoming Indigenous disadvantage in Western Australia report*. Perth; Department of Indigenous Affairs; 2005.
5. Department for Community Development. *From crisis to prevention: The community services industry study*. Perth: Department for Community Development; 1994.
6. Human Rights and Equal Opportunity Commission. *Bringing Them Home: Report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families*. Sydney: HREOC; 1997.
7. Ministerial Council on Education, Employment, Training and Youth Affairs. *National statement of principles and standards for more culturally inclusive schooling in the 21st century*. [Online] MCEETYA; 2000.
8. Gordon S, Hallahan K, Henry D. *Putting the Picture Together. Inquiry into Response by Government Agencies to Complaints of Family Violence and Child Abuse in Aboriginal Communities*. Perth: State Law Publisher; 2002.
9. O'Dea DJ [Commissioner]. *Royal Commission into Aboriginal deaths in custody. Regional report of inquiry into underlying issues in Western Australia Vols 1 and 2*. AGPS. Canberra; 1991.
10. Office of Indigenous Policy Coordination. *New arrangements in Indigenous affairs*. [Online] Canberra: Australian Government Department of Immigration and Multicultural and Indigenous Affairs. [cited 2005 Nov 15]; Available from: URL: http://www.oipc.gov.au/About_OIPC/Indigenous_Affairs_Arrangements/default.asp
11. Commonwealth of Australia. Council of Australian Governments (COAG) communiqué, 14 July 2006. [cited 2006 Sep 1]; Available from: URL: <http://www.coag.gov.au/meetings/140706/index.htm>
12. Machinery of Government Taskforce. *Government structures for better results: The report of the taskforce established to review the machinery of Western Australia's government*. Perth; 2001.
13. Government of Western Australia. *2006-07 Budget Statements* (Budget Paper No. 2, Volume 2). Perth; 2006.



APPENDIX B: A GUIDE TO THE SURVEY FIELDWORK INSTRUMENTS

TABLE B.1: OVERVIEW OF SURVEY FORMS

<i>Survey Form</i>	<i>Information about</i>	<i>Information provided by</i>	<i>Information recorded by</i>	<i>Number of forms required</i>
<p>1. HOUSEHOLD RECORD FORM (HRF)</p> <p>Names, sex, age, date of birth, relationship to carers, state/territory of birth and self-reported Indigenous status of each person in the household</p> <p>Primary and secondary carers of each child</p> <p>Duration that each child has lived with primary carer</p> <p>Relationships within the household</p> <p>Any other children aged 0–17 years who usually live at this address but who are temporarily away</p>	Number of people in the household and how they are related	Primary carer	Interviewer	One per family
<p>2a. CHILD HEALTH QUESTIONNAIRE (CHQLK)</p> <p>Collects information about children aged 0–3 years</p>	Child health information about children aged 0–3 years	Primary or secondary carer	Interviewer	One for each child aged 0–3 years
<p>2b. CHILD HEALTH QUESTIONNAIRE (CHQBK)</p> <p>Collects information about children and young people aged 4–17 years</p>	Child health information about children and young people aged 4–17 years	Primary or secondary carer	Interviewer	One for each child/young person aged 4–17 years
<p>3a. PRIMARY CARER'S QUESTIONNAIRE (CARER1)</p> <p>Collects information about the carer who is the main person looking after each child</p>	<p>Family and community circumstances</p> <p>Family life and carer's health</p> <p>Carer's background and experiences</p>	Primary carer	Interviewer	One or more per family
<p>3b. SECONDARY CARER'S QUESTIONNAIRE (CARER2)</p> <p>Collects information about secondary carer(s) of each child</p>	Carer's background and experiences	Secondary or primary carer	Interviewer	One or more per family
<p>4. YOUTH QUESTIONNAIRE (YSR-S/YSR-I)</p> <p>Collects information about young people aged 12–17 years</p> <p>Two administration methods are available:</p> <p>YSR-S (self-administered)</p> <p>YSR-I (administered by interviewer)</p>	<p>Family and community circumstances</p> <p>Schooling</p> <p>Health risk factors</p>	Young people aged 12–17 years	Young person or interviewer	One for each young person aged 12–17 years
<p>5. SCHOOL & TEACHER QUESTIONNAIRES</p>	Children and young people attending school	Teachers and school leadership team	Teachers and school leadership team	One for each child at school (consent required)



CONTENT OF THE SURVEY INSTRUMENTS

1. Household Record Form (HRF)
 - List of people currently living in the household
 - List of children about whom information needs to be collected
 - Whether any other children are temporarily away

- 2a. Child Health Questionnaire 0–3 years (CHQLK)
 - Information on birth and natural mother
 - Feeding, sleeping and early development
 - Immunisation and health care
 - Common chronic illnesses
 - Dental health
 - Breathing and asthma
 - Separations from family, accidents and hospitalisations
 - Disability and functional impairments
 - Use of medical and other services
 - Use of day care
 - Parenting practices

- 2b. Child Health Questionnaire 4–17 years (CHQBK)
 - Information on birth and natural mother
 - Immunisation and health care
 - Common chronic illnesses
 - Dental health
 - Breathing and asthma
 - Separations from family, accidents and hospitalisations
 - Disability and functional impairments
 - Use of medical and other services
 - Use of day care, kindergarten and pre-school
 - School and educational progress
 - Emotions, problem behaviours and social development
 - Emotional or behavioural difficulties – Strengths and Difficulties Questionnaire
 - Parenting practices
 - Diet and nutrition



3. Carer's Questionnaire (CARER1 and CARER2)

Languages spoken at home

Participation and involvement in Aboriginal activities and culture

Education

Employment and training

Benefits, pensions and income support

Family financial strain, carer's income

Family stress from alcohol, gambling and violence

Experience of forced separation or relocation

Positive family interactions and family resilience*

Family life stress events *

Personal and social supports*

Religious beliefs and practice of religion*

Housing arrangements and housing standards*

Perception of local community problems*

Adequacy of, and access to, community amenities and services*

** asked of primary carer only*

4. Youth Questionnaire (YSR-I and YSR-S)

Knowledge of Aboriginal language, culture and heritage

Health risk behaviour (smoking, sex, alcohol and drugs)

Diet and nutrition

Breathing and asthma

Emotions, problem behaviours and social development

Emotional or behavioural difficulties – Strengths and Difficulties Questionnaire

Depression and suicidal behaviour

Perceptions and experience of school

Experience of racism and bullying

Exposure to family violence, alcohol and gambling

Physical fitness and participation in sport

Religious beliefs and practice of religion

Friends and peer influence

Family support and encouragement



5a. Principal's Questionnaire — School Details

School contact information, school type and year range

Student enrolment (Aboriginal and non-Aboriginal students)

Number of teaching staff (Aboriginal and non-Aboriginal)

Number of non-teaching staff (Aboriginal and non-Aboriginal)

Number of support staff external to the school (Aboriginal and non-Aboriginal)

Proportion of new (inexperienced) teachers

Implementation of professional development and curriculum activities for Aboriginal education

Principal's ratings of:

- School, social and community problems affecting the overall school environment
- School morale and pastoral care arrangements
- School's resources for education of Aboriginal students

Whether school has access to an Aboriginal and Islander Education Officer (AIEO)

Whether school has an Aboriginal Student Support and Parent Awareness (ASSPA) Committee

5b. Principal's Questionnaire — Student Academic Details

Main language spoken – at home, in the playground, in the classroom

Rating of overall academic performance

Achievements in literacy and numeracy

Duration of current enrolment at current school

Attendance record this year

Whether boarding, hostel or day student

Whether removed from class for behaviour problems

Use and need of educational support services

5c. Teacher's Questionnaire — Student Behaviour

Emotional or behavioural difficulties – Strengths and Difficulties Questionnaire

Functional impairment (peer relations, classroom learning)

Burden and need for professional help

5d. Teacher's Questionnaire* — Student Skills

Matrices – Non-verbal reasoning skills

Word Definitions – English language proficiency

** For high school students this section was administered by a school counsellor, form teacher, year head, or year coordinator*



APPENDIX C: DETERMINATION OF LEVELS OF RELATIVE ISOLATION (LORI) BASED ON ARIA++

INTRODUCTION

In 1997 the Australian Government Department of Health and Aged Care (DHAC) commissioned the National Key Centre for Social Applications of Geographic Information Systems (GISCA) to develop an index of remoteness and accessibility to services. The result of this work was the ARIA index.¹ ARIA measures accessibility to services by calculating road distances to population centres of varying sizes. The ARIA index quickly became widely accepted within both research and policy settings. As a result, the Australian Bureau of Statistics (ABS) decided to incorporate ARIA into the Australian Standard Geographical Classification in time for the 2001 Census of Population and Housing.^{2,3} The ABS did this based on a revised version of ARIA, which GISCA have called ARIA+. ARIA+ had two major changes compared to the original ARIA — the incorporation of an extra class of service centres, and changes to the cut-off scores that defined the five broad categories of remoteness.

It is clear that remoteness plays a significant part in describing the circumstances of Aboriginal children in Western Australia, and has a key role in placing the wellbeing and development of Aboriginal children in the context of their environment. The WAACHS team looked to the ARIA index as a possible means of doing this. However, the ARIA has been defined in terms of the total population of Australia and was not specifically designed to describe the circumstances of Aboriginal children and families. In particular, the Very Remote category of ARIA and ARIA+ contain only one per cent of the total population of Australia, but over 25 per cent of the WAACHS children were living in areas classified as Very Remote. Analysis of the survey data showed that the families living in Very Remote WA could not be considered as a homogenous group in terms of their relative isolation and access to services. Geographically, the area classified as Very Remote represents almost three-quarters of the land mass of Western Australia. As an example, within the Kimberley region of Western Australia, only the area in the immediate vicinity of Broome is classified as Remote, the rest of the region being classified as Very Remote. Even at the level of the underlying index values, there is no discrimination between, for example, Halls Creek which has a small hospital, and the much smaller community of Balgo, several hours drive south of Halls Creek and much more isolated. Both receive the maximum score of 12 under the original ARIA. While Halls Creek is a small town, it does act as a regional service centre for a number of communities in the East Kimberley. In terms of WAACHS variables such as adherence to traditional culture and language, there was a considerable degree of variation within the Very Remote class that could not be described using ARIA.

The survey team approached GISCA who were already undertaking developmental work on a new product called ARIA++, which introduces another level of service centre and provides more flexibility in describing variations in isolation within the most remote regions of Australia. At the request of the survey team, GISCA produced a version of the ARIA++ based on 1996 Census Collection Districts (CDs) that were used as the sampling frame for WAACHS. This has allowed a much greater degree of discrimination within the Very Remote category. For the purposes of the survey, categories of relative isolation have been defined using the ARIA++ index that attempt to capture the diversity of locations where Aboriginal families live.



ARIA INDEX

The ARIA index measures remoteness by means of road distances from service centres of varying sizes. Four categories of service centre were defined based on population:

- A: 250,000 and greater
- B: 48,000 to 249,999
- C: 18,000 to 47,999
- D: 5,000 to 17,999.

The calculations were based on a set of 11,340 populated localities as defined by the Australian Surveying and Land Information Group (AUSLIG). These localities include some locations that are not permanently settled. For each populated locality, the road distance to the nearest service centre in each category was calculated. Scores were assigned based on the ratio of the distance to the nearest service centre compared to the mean distance for that category. These scores were assigned on a scale of 0 to 3, and a total score derived by summing the component scores to give a score between 0 and 12. The four categories of service centre were chosen to represent different levels of service availability, with an expected strong correlation between number and type of services offered in a service centre and the population of that service centre.

Once ARIA scores are calculated for each populated locality, the scores are interpolated onto a one kilometre square grid. The scores on this grid are then averaged over specific areas to produce scores for these areas, for example CDs.

ARIA+ INDEX

There are two major differences between the ARIA and the ARIA+. The first is the inclusion of an extra category of service centre with population:

- E: 1,000 to 4,999

This results in a score from 0 to 15. In addition, the cut-off scores for defining the categories of remoteness were altered. This reduced the size of the Highly Accessible category, while increasing the size of the Remote and Very Remote categories. The ABS felt the Remote and Very Remote categories needed to be enlarged to ensure sufficient sample would fall in these areas in population surveys to allow results to be tabulated at this level. Note that in the ABS adoption of ARIA+, slightly different labels have been given to the five categories of remoteness.

ARIA++ INDEX

The ARIA++ index includes a sixth category of service centre with population:

- F: 200 to 999

This results in scores over the range 0–18. Category F service centres do play a role in Aboriginal life. For instance, the Warburton community, with population around 450, is the major regional centre for the central desert communities. Under the ARIA++ classification, Halls Creek receives a score of 12, and Warburton receives a score of 15, with the maximum score of 18 being reserved for truly remote, small and isolated communities (e.g. Balgo).



DEVELOPMENT OF CATEGORIES FOR LEVEL OF RELATIVE ISOLATION

In order to use the ARIA++ index, the survey team looked at grouping the index values into a small number of classes that had the following attributes:

- ◆ were sufficiently large in population to allow analysis of results
- ◆ were as internally homogeneous as possible with respect to variables that were likely to be associated with remoteness and isolation from services.

To determine suitable cut-off values, an analysis was undertaken of survey data by ARIA++ for a range of variables that were potentially associated with access to services, and strength of adherence to traditional cultures. These included:

- ◆ whether carers can speak an Aboriginal language conversationally
- ◆ whether children can speak an Aboriginal language conversationally
- ◆ whether the carer has attended any Aboriginal ceremonies in the previous 12 months
- ◆ whether the carer has attended any Aboriginal festivals or carnivals in the previous 12 months
- ◆ whether the carer has been involved with any Aboriginal organisation in the previous 12 months
- ◆ carer-reported distance to nearest doctor and nearest hospital
- ◆ carer-reported condition of roads
- ◆ whether the community was classified as a remote Aboriginal community for the purposes of the survey. This was a binary classification determined at the time of the survey fieldwork that identified discrete Aboriginal communities that were isolated from medical services
- ◆ whether roads ever become unusable due to flooding.

The analysis involved producing detailed tables by fine classifications of ARIA++ as well as fitting spline curves to describe the shape of association between a variable and ARIA++. The method of Generalised Additive Models (GAM) was used to fit these spline curves (Hastie and Tibshirani, 1990)⁴. See, for example, Figure 7.1 in Chapter Seven which shows the proportion of children and carers who are conversant in Aboriginal languages by ARIA++.

A score of 0.2 was chosen as the cut-off for the most accessible category under ARIA+ — in Western Australia this area corresponds with the Perth metropolitan area. It made sense to retain this category as the least isolated category, as it covers over 30 per cent of the Aboriginal population and matches well with other geographic classifications. However, for the purposes of describing the Aboriginal population of Western Australia, it did not make sense to try to maintain the other existing category boundaries. Table C.1 shows the distribution of the WAACHS sample children by the five categories of ARIA and ARIA+. The geographical distribution of Aboriginal and Torres Strait Islander children is markedly different from non-Aboriginal children and there are only modest populations of the three middle categories. It made sense to consider distributing the categories further towards the remote end of the scale.



TABLE C.1: DISTRIBUTION OF WAACHS SURVEY CHILDREN, BY ARIA AND ARIA+

	ARIA	ARIA+(a)
	Per cent	
Highly accessible	41.0	31.3
Accessible	10.3	10.5
Moderately accessible	11.2	17.9
Remote	11.5	13.8
Very remote	26.0	26.5

(a) The ABS uses slightly different terminology to describe the five classes in their adoption of ARIA+ into the ASGC.

The results of these analyses suggested that there was a strong degree of homogeneity between ARIA++ values 0 and 8, another homogeneous group between 8 and 13, and a strong trend over the last few points of the scale, particularly between 17 and 18. As a result, the following groupings were proposed:

TABLE C.2: RELATIONSHIP OF LEVEL OF RELATIVE ISOLATION AND ARIA++

Level of Relative Isolation	ARIA++ range
None	0 – 0.2
Low	0.2 – 8
Moderate	8 – 13
High	13 – 17
Extreme	17 – 18

Table C.3 shows the distribution of the Aboriginal population of Western Australia, along with the survey sample, by these five levels of relative isolation. Although the size of each area, in terms of population numbers, declines with increasing level of relative isolation, the very strong differences between the Moderate, High and Extreme areas justified their establishment as separate regions. With almost 10 per cent of the population in areas of Extreme relative isolation, the smallest of the five areas, there are still large enough numbers to allow proper analysis by this classification.

TABLE C.3: WESTERN AUSTRALIAN ABORIGINAL POPULATION AND WAACHS SAMPLE, BY LEVEL OF RELATIVE ISOLATION (LORI)

LORI	1996 Census – Children		1996 Census – Persons		WAACHS – Children		WAACHS – Carers	
	Number	%	Number	%	Number	%	Number	%
None	7 818	33.6	16 509	32.5	1 636	30.9	983	31.1
Low	5 754	24.7	12 152	23.9	1 680	31.7	1 036	32.8
Moderate	4 987	21.4	11 218	22.1	971	18.3	556	17.6
High	2 800	12.0	6 325	12.4	520	9.8	275	8.7
Extreme	1 885	8.1	4 524	8.9	482	9.1	303	9.6
Total	23 244	100.0	50 728	100.0	5 289	100.0	3 153	100.0

Table C.4 shows the distribution of selected characteristics used in the analysis, by Level of Relative Isolation. While areas of None or Low relative isolation are very similar, there are strong differences between the remaining areas for these characteristics.



TABLE C.4: SELECTED CHARACTERISTICS OF WAACHS CARERS AND CHILDREN, BY LEVEL OF RELATIVE ISOLATION (LORI)

LORI	Remote community	Carer speaks Aboriginal language	Children speak Aboriginal language	Participate in Aboriginal cultural events	Roads ever become unusable	Roads in good condition
Per cent						
None	0.0	4.0	1.7	9.9	8.1	89.9
Low	0.0	6.0	3.3	9.4	13.2	87.8
Moderate	10.9	35.2	15.6	24.2	28.7	84.8
High	65.9	45.4	30.4	43.5	68.0	73.6
Extreme	100.0	80.0	59.6	61.7	82.2	69.0

To give an idea of how this index scores individual communities, values for selected localities in Western Australia are shown in Table C.5. The considerable differences between ARIA and ARIA++ can be clearly seen in this table. Under ARIA, small service centres such as Meekatharra and Derby are classified Very Remote, as well as the smaller and more outlying regions that these centres service.

TABLE C.5: ARIA++ AND ARIA VALUES FOR SELECTED LOCALITIES IN WESTERN AUSTRALIA

Locality	ARIA++ Score	LORI	Original ARIA value	Original ARIA category
Perth	0.00	None	0.00	Perth
Rockingham	0.04	None	0.29	Highly Accessible
Mandurah	0.21	Low	0.47	Highly Accessible
Bunbury	0.94	Low	1.14	Highly Accessible
Busselton	1.63	Low	1.84	Accessible
Albany	2.70	Low	2.69	Accessible
Geraldton	2.70	Low	2.76	Accessible
Kalgoorlie	3.97	Low	3.87	Moderately Accessible
Merredin	5.32	Low	5.31	Moderately Accessible
Kalbarri	6.61	Low	6.62	Remote
Esperance	7.51	Low	7.21	Remote
Carnarvon	8.15	Moderate	8.16	Remote
Port Hedland	9.00	Moderate	9.00	Remote
Broome	9.00	Moderate	9.00	Remote
Karratha	9.00	Moderate	9.00	Remote
Meekatharra	10.80	Moderate	10.79	Very Remote
Derby	11.10	Moderate	11.41	Very Remote
Newman	11.84	Moderate	8.80	Remote
Halls Creek	12.00	Moderate	12.00	Very Remote
Fitzroy Crossing	12.00	Moderate	12.00	Very Remote
Kununurra	12.00	Moderate	12.00	Very Remote
Laverton	13.07	High	10.17	Very Remote
Pannawonica	13.72	High	10.74	Very Remote
Wyndham	14.23	High	12.00	Very Remote
Coral Bay	14.44	High	12.00	Very Remote
Warburton	15.00	High	12.00	Very Remote
Oombulgurri	15.08	High	12.00	Very Remote
Kalumburu	15.10	High	12.00	Very Remote
Christmas Creek	17.12	Extreme	12.00	Very Remote
Jigalong	17.97	Extreme	10.52	Very Remote
Punmu	18.00	Extreme	12.00	Very Remote
Balgo	18.00	Extreme	12.00	Very Remote
Mulan	18.00	Extreme	12.00	Very Remote



SUMMARY

The ARIA++ index gives the opportunity to discriminate between levels of remoteness within remote Aboriginal communities. Compared to the original ARIA, which classified over one-quarter of the Western Australian Aboriginal population to the Very Remote category, the ARIA++ allows this group to be subdivided. These subdivisions reveal trends in Aboriginal culture and language, as well as trends in terms of access to medical services that would otherwise be obscured under the original ARIA. While ARIA can work well in describing non-Aboriginal populations, ARIA++ is clearly superior in describing the Aboriginal population. It is the basis of much of the analysis presented in this publication.

ENDNOTES

1. Department of Health and Aged Care, National Key Centre for Social Applications of Geographical Information Systems (GISCA). *Measuring Remoteness: Accessibility/Remoteness Index of Australia (ARIA) Revised Edition*. Occasional papers: New Series No. 14. DHAC. Canberra: 2001.
2. Australian Bureau of Statistics. *Information Paper: ABS Views on Remoteness*. (Catalogue Number 1244.0). Canberra: 2001.
3. Australian Bureau of Statistics. *Information Paper: Outcomes of ABS views on Remoteness Consultation, Australia*. (Catalogue Number 1244.0.00.001). Canberra: 2001.
4. Hastie TJ, Tibshirani RJ. *Generalised Additive Models*. Chapman and Hall. New York: 1990.



APPENDIX D: RELIABILITY OF ESTIMATES

MEASURING SAMPLING ERROR

Estimates from the WAACHS are based on information obtained from a sample of families, and are therefore subject to sampling variability. The figures from the sample may be different from the figures that would have been obtained had all families with Aboriginal children in Western Australia been included in the collection, just by virtue of random chance. This variability is known as sampling error. The size of the survey sample and the way the sample is designed are factors in determining the amount of sampling error.

Sampling errors can be estimated from the survey data. One measure of the sampling error is given by the 95% confidence interval. The confidence interval measures the degree to which an estimate may vary from the value that would have been obtained from a complete enumeration of the entire population. There are about nineteen chances in twenty (i.e. a 95% chance) that the population value will lie in the range indicated by the confidence interval.

For example, as noted in Chapter Five, the proportion of primary carers who reported 7–14 life stress events in the 12 months prior to the survey was estimated to be 21.2 per cent with a 95% confidence interval (CI) of (19.3%–23.1%). This means that there is a 95% chance that if the entire population had been enumerated, and not just the sample, the population value would lie between 19.3 per cent and 23.1 per cent (a range of 3.8 percentage points).

The size of a confidence interval is a measure of the accuracy of an estimate. The smaller the confidence interval the more accurate the estimate is. As a general rule, the smaller the sample size used for calculating an estimate, the less accurate that estimate will be. For instance, the proportion of carers living in the Perth metropolitan area who reported 7–14 life stress events was estimated to be 19.4 per cent with a 95% confidence interval of (16.1%–23.3%), a range of 7.2 percentage points. As only approximately 35 per cent of primary carers live in the Perth metropolitan area this estimate is based on a smaller sample size than the estimate for Western Australia overall. As shown above, the confidence interval for the Western Australia estimate has a range of 3.8 percentage points whereas, when restricted to the Perth metropolitan area only, the confidence interval has a range of 7.2 percentage points.

ASSESSING STATISTICAL SIGNIFICANCE

Confidence intervals provide a simple means to assess the statistical significance of differences between figures. When comparing different estimates, it is possible that differences could arise by chance alone because the data is based on a random sample. Differences between figures are said to be statistically significant when it is very unlikely that the difference could be attributed to random chance. The confidence interval gives a ready means of identifying the statistical significance of differences between figures.

For example, in Chapter Six it was noted that the proportion of dwellings in the Perth metropolitan area with high household occupancy was estimated to be 7.0 per cent. In areas of extreme relative isolation, the corresponding proportion was estimated at 39.7 per cent. The respective 95% confidence intervals are (4.4%–10.4%) and (29.7%–49.7%). If two confidence intervals overlap we conclude that there is a possibility



the difference could be due to chance variation. When there is no overlap, as in this example, we conclude that the difference is statistically significant. That is, it is likely to represent a real difference in the proportion of dwellings with high household occupancy between the two areas that cannot be explained by random chance alone. However, the proportion of dwellings with high household occupancy was estimated to be 10.0 per cent in areas of low relative isolation, with a 95% confidence interval of (7.7%–12.7%). As there is substantial overlap between this confidence interval and the confidence interval for the estimate from the Perth metropolitan area, it is possible that the difference in the estimates could be due to chance variation. The difference between the figures for the Perth metropolitan area and for areas of low relative isolation would be regarded as not statistically significant.

If a difference is not statistically significant, it does not necessarily mean that there is no real difference between the groups being compared. Where there is a true but small difference, it is possible that the difference is smaller than the accuracy of the estimates, as measured by the confidence interval. For instance, if there was a one per cent difference in the true population values of the proportion of students whose academic performance was average or above average between the Perth metropolitan area and areas of low relative isolation, the survey could not detect this, as the confidence intervals for the estimates are wider than one per cent. This is referred to as the power of the survey. Generally speaking, the survey does not have the power to detect differences in figures less than three to four per cent, and the power of the survey is reduced for small subsets of the survey population.

NON-SAMPLING ERRORS

In addition to sampling error, survey estimates can be subject to other inaccuracies which are referred to collectively as non-sampling error. Non-sampling errors can occur because of form design limitations, errors in reporting by respondents due to difficulties recalling certain data or lack of appropriate records for certain data, errors made in collection such as in recording and coding data by the interviewers, and errors in the processing of the data. Non-sampling errors may occur in any enumeration, whether it is a full census or a sample.

Every effort is made to reduce non-sampling error to a minimum by careful design and testing of questionnaires, thorough training of interviewers, efficient operating procedures including quality control procedures, editing of survey returns and use of appropriate survey methodologies.



APPENDIX E: SATISFACTION WITH COMMUNITY SERVICES AND FACILITIES — WAACHS AND 1993 WA CHS

Primary carers of Aboriginal children were asked a series of questions concerning their overall satisfaction with access to range of services and facilities. Primary carers living in discrete remote communities were not required to answer several of these questions, as they were deemed irrelevant to their unique living circumstances. This group of carers were asked a few extra questions designed to take account of these unique circumstances. As reported in Chapter Two, it has been possible to compare satisfaction with access to services and facilities as rated by carers of Aboriginal children with the carers of non-Aboriginal children, as a similar set of questions were asked on the 1993 Western Australian Child Health Survey (WA CHS).

While some of the questions were identical between the WAACHS and WA CHS, there were minor wording variations across the other common items. Excluding the remote community questions, six questions asked in the WAACHS were not asked in the WA CHS. These differences are summarised in Table E.1.



TABLE E.1: DIFFERENCES BETWEEN SATISFACTION WITH ACCESS TO SERVICES AND FACILITIES QUESTIONS IN THE WAACHS AND 1993 WA CHS

<i>WAACHS item — Remote community</i>	<i>WAACHS item — Non-remote community</i>	<i>1993 WA CHS item</i>
Not asked	Public transport systems	Public transport systems
School bus service	School bus service	Not asked
Street lighting	Street lighting	The street lighting
Banking facilities	Banking facilities	A bank
A movie theatre/outdoor pictures	A movie theatre	A movie theatre
A hall for live theatre or performances	A hall for live theatre or performances	A hall for live theatre or performance
Shops or shopping centre	Shops or shopping centre	Shopping centres
A public telephone	A public telephone	A public telephone box
Schools	Schools	A school
Taxis	Taxis	Not asked
Church	Church	A church
Not asked	A general practitioner	General practitioner
Not asked	A community centre	Community centre
A community or child health clinic	A community or child health clinic	Community or child health clinic
Family and Children's Services (Welfare)	Family and Children's Services (Welfare)	Not asked
Activities of children outside school	Activities of children outside school	Organised activities for children e.g. PCYC, scouts
Not asked	After school care/vacation care	After school care/vacation care
Not asked	Child care facilities	Child care facilities
A police service/regular patrols	A police station	A police station
Not asked	Ambulance	An ambulance service
The Flying Doctor	The Flying Doctor	Not asked
Not asked	A public library	A public library
Not asked	Place where teenagers can get together	Place where teenagers can get together
A swimming complex (indoor or outdoor)	A swimming complex (indoor or outdoor)	A swimming complex (indoor or outdoor)
Sporting facilities	An indoor sports centre for games	An indoor sports centre
A playing field where your children can play	A playing field where your children can play	A playing field where your children can go
Outdoor playing fields for organised sport	Outdoor playing fields for organised sport	Outdoor playing fields, ovals
Aboriginal Medical Services	Aboriginal Medical Services	Not asked
Opportunities for work	Work	Not asked
Post box or postal service	Not asked	Not asked
Roads to the community	Not asked	Not asked
Roads within the community	Not asked	Not asked
Access to airstrips	Not asked	Not asked

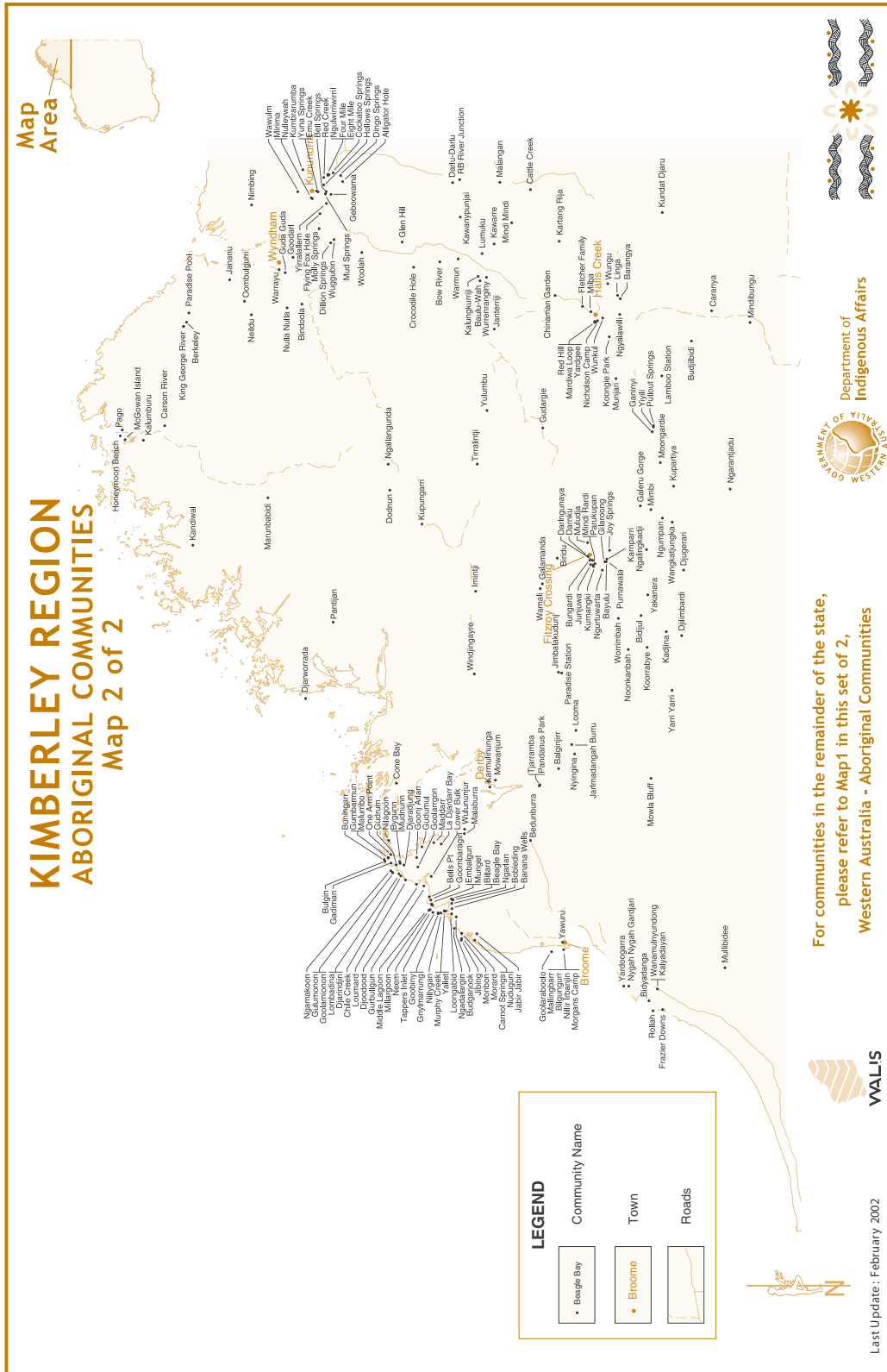


APPENDIX F: WESTERN AUSTRALIAN ABORIGINAL COMMUNITIES MAPS



Reproduced with permission from the Western Australian Department of Indigenous Affairs





Reproduced with permission from the Western Australian Department of Indigenous Affairs



