



# Language ecologies. A tool for understanding linkages between Indigenous languages and well-being

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# Acknowledgement of Country

We acknowledge and celebrate the First Australians on whose traditional lands we meet and work, and whose cultures are among the oldest continuing cultures in human history.





# Indigenous languages and well-being

- based on current work for upcoming National Indigenous Languages Report (NILR) by Pillar 2
- led by Department of Communication & the Arts (DOCA)
- International Year of Indigenous Languages (IYIL)
- NOT pre-empting NILR
- reporting on language ecologies and methodologies

Venn, D., Dinku, Y., Markham, F., Simpson, J., Angelo, D., O'Shannessy, C.,
Kral, I., Hunt, J. & Dreise, T.(2019). Indigenous language use and well-being.
Preliminary findings from the National Aboriginal and Torres Strait Islander Social
Survey [Final draft Feb 26]. CAEPR & ARC CoEDL, ANU
Angelo, D., O'Shannessy, C., Simpson, J., Kral, I., Smith, H. & Browne, E. (2019).
Well-being and Indigenous Language Ecologies (WILE): a strengths-based
approach . Literature review, National Indigenous Languages Report, Pillar 2.
[Final draft Feb 26]. ARC Centre of Excellence for the Dynamics of Language,
Australian National University





### Overview

- Evidence base & First Nations' languages
  - language diversity
  - language data
- Language ecologies
  - Importance for linking to well-being
  - Operationalising Language Ecologies
- Empirical Model
  - empirical strategy
  - well-being variables
  - language variables
  - other explanatory variables





### First Nations' voices: Languages & well-being

It has opened up many doors in my Gumbaynggirr language journey across all facets of my life and has given me back my pride as an Aboriginal man. I am passing on my knowledge and skills to other Aboriginal people so they can feel the way I feel. I feel more connected to my language, my homeland, my people, the spirits of my homeland and most of all to my ancestors.

Michael Jarrett, author profile, Bellingen Writers Festival 2016,

Centre for Ecological Learning

http://www.cel.org.au/uncle-michael-jarrett/

Knowing that our own language and culture play the biggest role in growing our spirit, our connection to our land and the stories of our grandmother and grandfathers. With our language we know where we belong, we know the names from our country and Jukurrpa (Dreaming stories and designs). Young people can't lead a good, healthy and happy life without this. Language and culture come first. When kids feel lost and their spirit is weak then they can't learn well or be healthy.

Warlpiri Patu Kurlangu Jaru,

submission to Our Land Our Languages parliamentary report

(Commonwealth of Australia, 2012: 11) 5





# Research on languages & well-being

Link noted across a range of well-being domains in Australia and overseas settler-colonial societies

bringing a language perspective to inform this work

- Biddle & Swee (2012). The relationship between well-being and indigenous land, language and culture in Australia. *Australian Geographer*, *43*(3), 215–232.
- Dockery, Alfred M. (2010). Culture and well-being: The case of Indigenous Australians. Social Indicators Research, 99(2), 315–332.
- Schultz, Abbott, Yamaguchi, & Cairney. (2018). Australian indigenous land management, ecological knowledge and languages for conservation. *EcoHealth*.
- Chandler & Lalonde. (1998). Cultural continuity as a hedge against suicide in Canada's First Nations. *Transcultural Psychiatry*, *35*(2), 191–219.
- Reid, John, Varona, Golda, Fisher, Martin, & Smith, Cherryl. (2016). Understanding Maori 'lived' culture to determine cultural connectedness and wellbeing. *Journal of Population Research*, 33(1), 31–49.



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### **Traditional Languages**

The AIATSIS map of Indigenous Australia.



David R Horton (creator), © Aboriginal Studies Press, AIATSIS, and Auslig/Sinclair, Knight, Merz, 1996.





### Traditional Indigenous Languages

- many hundreds spoken before invasion & colonisation
- language, land/seas, culture & spirituality bound together
  - sense of identity, belonging, agency and purpose
- around 13 languages still learned as L1s by children
  - everyday language of community or family
  - maintenance programs, incl. bilingual education
- many more still spoken, e.g. by older people
- some remembered, e.g. words still in use, from childhood
- some from historical sources or linguistic documentation
  - relearned for occasional use, special purposes; to teach others
  - "L2" programs of different types target language
- Census: speaks a language other than English at home
  - meaning of responses mediated according to L1, L2 or revival contexts





### "New" (contact) Indigenous Languages

- not "Traditional": caused by language contact
- some partially "recognised" with large speaker numbers
  - Kriol 20-30,000 speakers (estimated\*; 2016 Census 7155)
  - Yumplatok 20,000 speakers (estimated\*; 2016 Census 6000)
- some not recognised/named
  - northern Cape York, Gulf country, Barkly, Qld Settlements
  - shifting language use
- English-lexified: most common pattern, not all
  - words historically of English origin: autonomy from English?
  - vocabulary, meanings, sounds, endings, word-building, phrases, sentences, genres & styles not English-like
- not captured or \*not well captured in survey data
  - standardised nomenclature? confidence of "languagehood"
  - which language: traditional or everyday
- Census: speaks a language other than English at home
  - captures some New Languages: 8000s ASCL: "Indigenous"







# English(es)

- Acquired as a first language by most Indigenous Australians

- Standard Australian English
- + local ways of speaking English: identity marked
  - differences in spoken usage may be significant
- Learned as a second/foreign language in many contexts (to varying levels, depending on opportunities)
  - second language = target language used socially around you (i.e. with peers, neighbours, sport...)
  - foreign language = target language taught/used only in classroom (i.e. not with peers, neighbours, sport...)

Census: if YES: speaks a language other than English...
 how well does the person speak English? (4 scale)





### Nambucca Heads & surrounds mid far-north coast NSW







### Nambucca Heads & surrounds mid far-north coast NSW



### Gumbaynggirr (L2 revival)

- adults learning and teaching each other & young
- language nest, Muurrbay Aboriginal Language & Culture CoOp
- English L1: able to mark identity too
  - everybody speaks this





# Yuendumu Tanami Desert, NT







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KINDS OF LANGUAGES

# Yuendumu Tanami Desert, NT



- Warlpiri (L1 maintenance)
  - whole community way of talking
  - marker of local identity

- English (foreign language mostly)
  - little exposure outside of classroom, some workplaces



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## Badu Island western Torres Strait









### Badu Island western Torres Strait

- Kala Lagaw Ya (KLY) (L2 revitalisation for younger people)
- Yumplatok (also called Torres Strait Creole, Broken) (L1 many)
  - whole community way of talking
  - marker of local identity
- English (foreign language mostly)
  - little exposure outside of classroom, some workplaces





## Yarrabah far north Queensland







Yarrabah far north Queensland



Kriol 171 -7% Gudanji 13 - 0.5% Kuku Yalanji 10 - 0.4% Guugu Yimidhirr 4 - 0.2% Djabugay 3 - 0.1%

English 2116 - 85%

- adults relearning from historical resources: teaching children
- historically over 40 languages: some still spoken e.g. Guugu Yimidhirr Census 2016 QuickStats

Yarrabah IARE

 Yarrie Lingo (L1 mostly; named about 10 years ago) missing 7%

Gunggay (L2 revival: language of place)

- whole community way of talking
- marker of local identity

### • English (foreign language mostly)

little exposure outside of classroom, some workplaces





### socio-cultural function interacts with aspects of well-being

### identity

- group/community
- link to country
- shared history
- L1 or L2\*, TL and NL

- resilience
- belonging
- safe, supportive communities
- recognition

### and multilingual language ecology and individual repertoires



e.g. Yuendumu... Traditional L1 English L2



e.g. Yarrabah... New L1 Traditional L2 English L2



e.g. Nambucca-Coffs... Traditional L2 English L1





### socio-cultural function interacts with aspects of well-being

#### access to services

- use of own strong L1
- as L2 English learners/speakers
- access to services

- agency, benefits...
- L1 recognised, valued
  - L1 opportunities
  - L1 staffing, interpreting...
- success as L2 speaker
  - appropriate L2 training
  - well-informed residents

### and multilingual language ecology and individual repertoires



e.g. Yuendumu... Traditional L1 English L2



e.g. Yarrabah... New L1 Traditional L2 English L2



e.g. Nambucca-Coffs... Traditional L2 English L1





# Language ecologies: a way forward understanding dynamics

- place-based: language & interactions, services, country...
- Ianguage strengths: multilingualism
- differentiating contexts: L1, other situations
- incorporate post-contact languages
- language processes: maintenance, shift, revival

but cities & heterogeneous towns







# **Operationalising Language Ecologies**

- Traditional Language: TL1, TL2, TL1some/TL2some
- New Language: NL1 NL1 most NL1 some
- English L1 or L2: ENG1 ENG2 ENG2 some
- Demographics of location: URBAN, HET, unspec
- 1<sup>st</sup> pass: Census
- 2<sup>nd</sup> pass: manual checking: ground-truthing: specialist linguistic knowledge
  - . . .
- granularity, statistical areas, de-identification...



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### Some potential data sources

	Lang Type	Multilingualism	Proficiency	Lang Activity
<b>Census</b> - national - 2016	main language at home English	Potential for 1 language (TL or NL) + English	only English (4 point scale)	
<b>NATSIH</b> - 9,000+ - 2012/3	Aboriginal Torres Strait Other Eng	Potential for 1 INDIG_LANG + English	only English	
<b>NATSISS</b> - 11,000+ - 2014/5	Aboriginal or Torres Strait English	Potential for 1 INDIG_LANG + English	L2 English (over 15) L2 INDIG: well vs some words	L2 learners of INDIG identified
LSIC +Indigenous led -11 sites, 150 children	INDIG (list of 20) or name own Kriol Sign overseas English(es)	Potential for several TLs, 1 NL, Englishes (data release: 1 TL)	each language 4- 5 point scale, incl. literacy	context of use, incl. interlocutors school language activities



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### Data

### NATSISS (2014/215)

https://www.abs.gov.au/AUSSTATS/abs@.nsf/exnote/4714.0

#### Scope

- 11,178 people in private dwellings
- People aged 15 and over

#### Well-being data

• Subjective and objective indicators

#### Language data

- Repertoire
- Ecology





## **Empirical Strategy**

- W = F(L;X)
- W well-being Indicator
- F(.)
  - Logit
  - OLS
- L speaking an Indigenous language
- X observable and unobservable confounding factors





# **Empirical Strategy**

#### Spiritual/cultural

- Identifying with language group/tribe
- Participating / being involved in cultural events
- Lives on homeland
- Visiting homeland
- Hunting/gathering/fishing

### Emotional

- Full of life/energy
- Psychological distress (K5 scale)
- Life satisfaction
- Mental health





# **Empirical Strategy**

#### Social

- Frequent contact with family/friends
- Having a say in the community
- Getting support from community members
- Experience of unfair treatment

### Physical health

- Self-assessed health
- Long-term illness
- Daily smoking
- Risky alcohol consumption

### Economic

- Weekly personal income
- Employment status
- Income arts and cultural activities





# **Empirical Strategy**

- Employment in hospitality and tourism industries **Education**
- Completed Year 12
- Post school qualification

### Justice and safety

- Arrested past 5 years
- Ever been incarcerated
- Experienced physical violence past 12 month

#### Access to services

- Government services: Centrelink, employment services, motor vehicle registration etc.
- Healthcare if diagnosed with long-term illness
- Housing if lives in rental property
- Legal services if arrested/experienced violence





# **Empirical Strategy**

### IL proficiency

- English only: main language spoken at home is English and does not speak or understand an Aboriginal and/or Torres Strait Islander language
- EL1, some IL2: main language spoken at home is English and speaks or understands a few words of an Aboriginal and/or Torres Strait Islander language
- EL1, IL2: main language spoken at home is English and does speak or understand well an Aboriginal and/or Torres Strait Islander language
- IL1: main language spoken is an Aboriginal and/or Torres Strait Islander language





# **Empirical Strategy**

#### **EL proficiency**

- Good English: main language spoken at home is English OR main language spoken at home is an Aboriginal and/or Torres Strait Islander language and reports no difficulties understanding and/or being understood by English language speakers
- Limited English: main language spoken at home is an Aboriginal and/or Torres Strait Islander language and reports difficulties understanding and/or being understood by English language speakers





# **Empirical Strategy**

#### **Control variables**

- Demographic characteristics
- Level of education
- Marital status
- Family removal
- Household financial conditions
- Overcrowding
- Cultural participation
- Health status
- Personal stressors
- Labour force status
- Remoteness
- State



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NATSISS Category		Language ecology classification by           2016 Census population count (persons)					Proposed analytical category	% of population in category
	TL2, EL1	HET	NL1 freq.	TL1 freq.	TN mix	Total		category
NSW Major Cities	98060					98060	TL2, EL1	100.0
NSW Inner Regional	74792					74792	TL2, EL1	100.0
NSW Outer Regional	33258					33258	TL2, EL1	100.0
NSW Remote	7566					7566	TL2, EL1	100.0
VIC Major Cities	22502					22502	TL2, EL1	100.0
VIC Inner / Outer Reg.	22583					22583	TL2, EL1	100.0
VIC Remote	40					40	TL2, EL1	100.0
QLD Major Cities	62148					62148	TL2, EL1	100.0
QLD Inner Regional	32041	7324	548			39913	TL2, EL1	80.3
QLD Outer Regional	13629	28763	8972			51364	n/a	
QLD Remote / V. Remote	3152	1950	22008		4463	31573	IL1 frequent	83.8
SA Non-Remote	28514					28514	TL2, EL1	100.0
SA Remote / V. Remote	2432			2601		5033	n/a	
WA Major Cities	29179					29179	TL2, EL1	100.0
WA Inner / Outer Reg.	14232			133	2187	16552	TL2, EL1	86.0
WA Remote / V. Remote	7809		4843	7588	8693	28933	IL1 frequent	73.0
TAS Non-Remote	22836					22836	TL2, EL1	100.0
TAS Remote / V. Remote	687					687	TL2, EL1	100.0
NT Non-Remote		11930				11930	n/a	
NT Remote / V. Remote		6859	5755	23188	9752	45554	IL1 frequent	84.9
ACT Non-Remote	6323					6323	TL2, EL1	100.0

Source: computed from the 2016 Census with linguist hand-coding





# **Empirical Strategy**

#### Language ecologies

- TL2, EL1 where the predominant Indigenous language use pattern is speaking a traditional Indigenous language as a second language: comprising all of NSW, Victoria, Tasmania and the ACT, as well as nonremote areas of SA and WA and major cities and inner regional areas of Queensland
- IL1 frequent where new and/or traditional Indigenous languages are frequently spoken as a first language: comprising remote and very remote areas of Queensland, WA and the NT
- Three NATISS regions (Queensland outer regional, SA remote/very remote and NT non-remote) are not easily classified into language ecology regions, as they do not fit neatly into the 2 groups we've decided to use
  - Together, these three regions account for 5% of the adult NATSISS sample.





### **Cautionary notes**

- Traditional vs New Indigenous languages
- Reporting bias: language proficiencies & well-being
- Community-level data





### Language ecologies

Aboriginal and Torres Strait Islander people's present day use of their languages is rich, complex and diverse

Using language ecology frameworks has the potential to acknowledge

- First Nations multilingual strengths and agency
- language processes: maintenance, contact & shift: Traditional, New, Englishes
- people use different languages for different purposes

Language ecologies are broad arrangements of languages spoken in a particular place: attuned to imperatives of policy and service delivery





# Thank you

#### KINDS OF LANGUAGES





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### References

Amery, Robert. (2017). Recognising the communication gap in Indigenous health care. *The Medical Journal of Australia, 207*(1), 13-15. doi:10.5694/mja17.00042

Angelo, D. (2013). Identification and assessment contexts of Aboriginal and Torres Strait Islander learners of Standard Australian English: Challenges for the language testing community. Papers in Language Testing and Assessment, 2(2), 67–102.

Angelo, D. & Hudson, C. (2018). Nationally Consistent Moderated Collection of English as an Additional Language/Dialect (EAL/D) Data. Moderation Process for Schools.

Angelo, D., & McIntosh, S. (2014). Anomalous data about Aboriginal and Torres Strait Islander language ecologies. In E. Stracke (Ed.), Intersections: Applied linguistics as a meeting place. Newcastle upon Tyne: Cambridge Scholars Publishing.

Carter, N., Angelo, D., & Hudson, C. (forthcoming). Translanguaging the Curriculum: A Critical Language Awareness Curriculum for silenced Indigenous voices. In P. Mikan & I. Wallace (Eds.), Language Education Curriculum Design. New York: Routledge.

Christie, Frances, Clark, D., Gerot, L. and Palmer, M. (1993) *Adult literacy in urban situations in the Northern Territory, Volume 1*. Darwin: Centre for Studies of Language in Education, Northern Territory University.

Commonwealth of Australia (2012) Our Land Our Languages: Language Learning in Indigenous Communities. House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs Report. Canberra: Parliament of the Commonwealth of Australia.

Creagh, Sue 2013. A critical analysis of problems with the LBOTE category on the NAPLAN test. *Australian Educational Researcher* 41:1-23.

Dixon, S., & Angelo, D. (2014). Dodgy data, invisibility and the implications for social inclusion. A critical analysis of Indigenous student language data in Queensland schools. Australian Review of Applied Linguistics, 37(3), 213–233.

Freeman, Leonard A. & Staley, Bea. 2018. The positioning of Aboriginal students and their languages within Australia's education system: A human rights perspective. *International Journal of Speech-Language Pathology* 20:174-181.

Hobson, John, Kevin Lowe, Susan Poetsch and Michael Walsh (2010). Re-awakening languages: theory and practice in the revitalisation of Australia's Indigenous languages. Sydney: Sydney University Press.





Kral, Inge. and Morphy, Frances. (2006) 'Language'. In Hunter, B. H. (Ed.) Assessing the evidence on Indigenous socioeconomic outcomes: A focus on the 2002 NATSISS. CAEPR Research Monograph 26. Canberra: The Centre for Aboriginal Economic Policy Research, Australian National University, pp. 279-289.

Kral, Inge. and Schwab, R. G (Jerry). (2003) *The realities of Indigenous adult literacy acquisition and practice: Implications for remote community capacity development.* CAEPR Discussion Paper 257. Canberra: The Australian National University.

language contexts. Australian Review of Applied Linguistics, 36(3), 250–266.

Marmion, Doug, Obata, Kazuko, and Troy, Jakelin. 2014. *Community, identity, wellbeing: the report of the Second National Indigenous Languages Survey*, 79. Canberra: Australian Institute of Aboriginal and Torres Strait Islander Studies.

McConvell, Patrick, and Thieberger, Nicholas. (2001). *State of Indigenous Languages in Australia - 2001*: Australia State of the Environment Technical Paper Series (Natural and Cultural Heritage), Series 2. Canberra: Department of the Environment and Heritage.

McConvell, Patrick, and Thieberger, Nicholas. (2003). Language data assessment at the national level: learning from the State of the Environment process in Australia. Paper presented at *Maintaining the links: language, identity and the land : Proceedings of the Seventh FEL Conference. Broome, Western Australia, 22-24 September 2003*, Bath.

McConvell, Patrick, and Thieberger, Nicholas. (2006). Keeping Track of Indigenous Language Endangerment in Australia. In *Language Diversity in the Pacific: Endangerment and Survival*, eds. Denis Cunningham, D.E. Ingram and Kenneth Sumbuk, 54-84. UK: Multilingual Matters Ltd.

Morphy, Frances. (2007). Agency, contingency and census process: Observations of the 2006 Indigenous Enumeration Strategy in remote Aboriginal Australia: ANU Press.

Morphy, Frances. (2010). (Im)mobility: regional population structures in Aboriginal Australia. *Australian Journal of Social Issues,* 45(3), 363-382. doi:10.1002/j.1839-4655.2010.tb00184.x

Morphy, Frances. (2012). The Yolngu in place: Designing a population survey for north east Arnhem Land. *ATNS Working Paper Series (Agreements, Treaties and Negotiated Settlements), 3*, 36.

Poetsch, S. (2018). Languaging their learning: How children work their languages for classroom learning. In G. Wigglesworth, J. Simpson, & J. Vaughan (Eds.), Language practices of Indigenous children and youth. Transitions from home to school (pp. 147-172). London: Palgrave Macmillan.

Sellwood, J., & Angelo, D. (2013). Everywhere and nowhere: Invisibility of Aboriginal and Torres Strait Islander contact languages in education and Indigenous language contexts. Australian Review of Applied Linguistics, 36(3), 250–266.





Simpson, Jane. (2008). Language landscapes of children in remote Australia. In Warra wiltaniappendi: Strengthening Languages: Proceedings of the Inaugural Indigenous Languages Conference (ILC), 24 - 27 September 2007, eds. Robert Amery and Joshua Nash, 51-60. Adelaide: University of Adelaide.

Simpson, J., & Wigglesworth, G. (Eds.). (2008). Children's language and multilingualism. Indigenous language use at home and school. London, New York: Continuum.

Simpson, J., & Wigglesworth, G. (2018). Language diversity in Indigenous Australia in the 21st century. Current Issues in Language Planning. doi:10.1080/14664208.2018.1503389

Walsh, Michael (2018). "Language is like food": Links Between Language Revitalization and Health and Well-being. In L. Hinton, L. Huss, & G. Roche (Eds.), The Routledge Handbook of Language Revitalization (1st ed., pp. 5–12). New York: Routledge.

Simpson, Jane. (2018). Self-determination with respect to language rights. In Timothy Rowse and Laura Rademaker. Workshop on Indigenous self-determination. October 11-12 2018. Canberra: Academy of Social Sciences of Australia.

Wigglesworth, G., & Simpson, J. (2008). The language learning environment of preschool children in Indigenous communities. In J. Simpson & G. Wigglesworth (Eds.), Children's language and multilingualism. Indigenous language use at home and school (pp. 1-29). London: Continuum International.

Yap, Mandy, & Yu, Eunice. (2016). Operationalising the capability approach: developing culturally relevant indicators of indigenous wellbeing – an Australian example. Oxford Development Studies, 44(3), 315-331. doi:10.1080/13600818.2016.1178223





### **Extras**





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# Language Data Sets: issues: questions

Census example

- language other than English spoken at home
- main language or any? 'main' = L1, frequency, proficiency?
- 'at home'
- self-declared proficiency
- one response only (identity or L1?)
- social context (revival pride, concern...)
- (autonomous) language (esp. New Languages)





## Other issues

- coverage: only Census attempts national
- de-identification: language, location...
- count accuracy: mobility, auto-exclusion
- interviewer/collector knowledge
- language names
- coder knowledge: Mauritian Creole
- lack of comparability across data sets
- lack of cross-checking across data sets
- significant variables lacking: L1or L2; lang vs lit; ±SAE
- school domain: LBOTE, 'language', bilingual...





### Traditional Languages TL1 TL2 TL1some/TL2some

- Census unreliable, with caution, generalisations:
- less than 3.5%: definitely TL2
- over 66%: likely TL1
- between: likely TL1some/TL2some

### TL1 some/TL2 some could refer to

- a language shift context (older people who are speakers, younger people who are partial speakers)
- or in conjunction with HET it would indicate a patchy distribution, eg diaspora communities with first language speakers of one language living amongst other groups who are second language speakers of other languages





### New Languages: NL1 NL1 most NL1 some

- manual checking required: large-scale undercounting
- From the Census only Kriol & Yumplatok (still unreliable)
- NL1: over 66%
- Census: self-reported in just a few places
   e.g. Indigenous Locs: Minyerri 83%, Ngukurr 78%; Warraber 93%
- underreporting and mis-coding of responses

### NL1 most (more than half)

manual checking.

### NL1 some (less than half)

manual checking.





### English: ENG1, ENG2, ENG2 some

Self-reported English proficiency unhelpful – likely underreporting.

### **ENG1:** (close) variety of English is L1.

- Speaks English only might include New Language speakers
- Speaks Language at Home might include L2 speakers

#### **ENG2:** TL1 or NL1 area automatically treated as ENG2.

- ENG2 is important data for language-based services, such as interpreters, mothertongue education and English as a Second/Foreign Language, government officials fluent in the local language etc
- might not be apparent in NL1 areas

#### ENG2 some: TL1 some/TL2 some, &/or from NL1 most/NL1 some.

- language services, NL1 speakers' needs might not be apparent
- Urban, regional towns (HET): The needs of ENG2 populations tend to be submersed and depend on the presence of "goodwill" intervention (i.e. language-aware person in school, health, legal contexts).





### Demographics of location: URBAN HET unspec

#### URBAN: big coastal cities including their suburbs.

- very few Indigenous people as a proportion of the population. (e.g. Adelaide, Sydney, Perth)
- propose greater urban areas of these cities are treated as a single entity, such as Greater Capital Cities Statistical Areas
- should apply to cities with populations greater more than 200,000

# HET (heterogeneous): smaller urban areas with a relatively high proportion of Indigenous people (e.g. Darwin, Katherine, Tennant Ck)

- reflects a range of language repertoires some TL1, some NL1, some ENG1.
- some areas have quite disparate populations, e.g. Mapoon Napranum -Weipa (communities & mining town): patchy speaker distribution.
- HET could apply to towns with populations under about 200,000 (e.g. Darwin in our HET category - Greater Statistical Region is about 160,000)