



Mapping catchments and identifying gaps

Presentation at the
6th Biennial ACSPRI Social Science Methodology Conference

Sarah Randell
Law and Justice Foundation of NSW
14 December 2018



Conference paper

Mapping catchments and identifying gaps
Presentation to 6th Biennial ACSPRI Social Science Methodology Conference
Sarah Randell, 14 December 2018

Abstract

In October 2017, the Foundation was approached by Community Legal Centres NSW (CLCNSW) to: map the catchment areas of NSW community legal centres; identify and map the gaps in catchment coverage. From the perspective of CLCNSW, the rationale for the work centred around: an annual directory of community legal centres (centres and their catchments) ; comprehensive information for referral purposes, as well as signposting of gaps ; providing information to the state government on the coverage of centre catchments. Our goal was to transform this data into a visual tool. The LJF 'matched' the CLC coverage data from CLCNSW to the ABS State Suburb geography to create a visual map. This data was then put into our mapping software (QGIS). An interactive map was published online on Tableau Public. Following feedback from centres and CLCNSW we made updates and finalised the catchment areas. Final map files were created by the LJF and provided to the CLC Review as part of CLCNSW submission for the state government review of community legal centres. This was a useful process in helping to define areas for service delivery and centre coverage and an opportunity to find a new way of presenting an existing dataset.

Publisher

Law and Justice Foundation of New South Wales
Level 13, 222 Pitt Street, Sydney NSW 2000
PO Box A109 Sydney South NSW 1235
P: +61 2 8227 3200
E: publications@lawfoundation.net.au
W: www.lawfoundation.net.au

© Law and Justice Foundation of New South Wales, 2018.

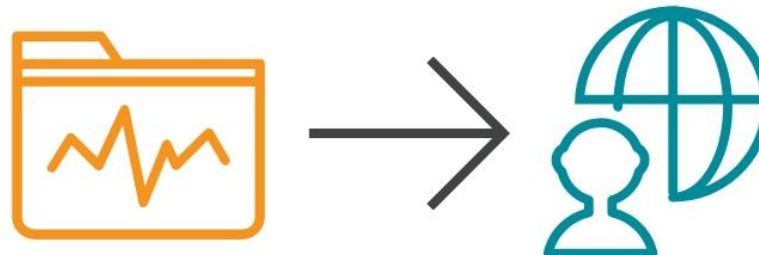
This presentation is copyright. It may be reproduced in part or in whole for educational purposes as long as proper credit is given to the Foundation.

Any opinions expressed in this publication are those of the authors and do not necessarily reflect the views of the Foundation's Board of Governors.



What this presentation will cover today...

- The Foundation
- Background to project
- Data and mapping process
- Ongoing use of the data
- Lessons learned





Who we are and what we do

The Law and Justice Foundation of NSW is an independent, not-for-profit organisation with a 50 year history of improving access to justice for the people of NSW through high quality research and support of selected projects to improve access to justice.

Small research team (6 researchers) who undertake a full range of work including:

- large scale surveys
- analysis of administrative data
- evaluations of what works to address legal need

Currently recruiting for Research Assistant(s)





Background to the project

Community Legal Centres NSW (CLCNSW)

- the peak representative body for almost 40 community legal centres in NSW
- provides support to, and represents and advocates for their members.



Community
Legal Centres
NSW

Community legal centres (CLCs):

- independent non-government organisations that provide free legal services to people and communities
- can be described as generalist or specialist centres.



Background to the project

In October 2017, the Foundation was approached by Community Legal Centres NSW (CLCNSW) to:

- map the catchment areas of NSW community legal centres
- identify and map the gaps in catchment coverage

From the perspective of CLCNSW, the rationale for the work centred around:

- an annual directory of community legal centres (centres and their catchments)
- comprehensive information for referral purposes, as well as signposting of gaps
- providing information to the state government on the coverage of centre catchments



Background to the project

Before the data came to the Foundation, CLCNSW undertook its own data gathering process:

- checking the previous catchments
- rechecking suburbs with the same and adjacent postcodes, with centres that may also cover them;
- sending the list of identified gap area suburbs for individual centres to potentially claim or reaffirm coverage
- finalising this as the foundation for the directory database which is used to refer the general public to their most relevant CLC



Foundation data and mapping process

- The Foundation was provided this directory data by CLCNSW outlining centre coverage
 - provided as Australia post suburbs by Centre
 - took the form of a large excel spreadsheet file
- Our goal was to transform this data into a visual tool



Foundation data and mapping process

- The LJF ‘matched’ the CLC coverage data from CLCNSW to the ABS State Suburb geography to create a visual map
 - Why? Software!
 - How? A process of data checking





Foundation data and mapping process

- This data was then put into our mapping software (QGIS)
 - Transform the data file: excel workbook to CSV
 - Join the CSV file to a spatial file using common fields
 - Visually check for gaps or oddities
- Importance of correctly representing the directory data
 - Suburbs shared between centres

QGIS: free and open-source cross-platform desktop geographic information system application that supports viewing, editing, and analysis of geospatial data





Foundation data and mapping process

- An interactive map was published online on Tableau Public
- QGIS (static maps – outputs used in reports, etc.) / Tableau (interactive, online, public)
- We received feedback about catchment areas and made changes based on this

This was a continual process.

Changes and updates were made based on feedback provided to CLCNSW and the LJF.



First draft map on Tableau Public

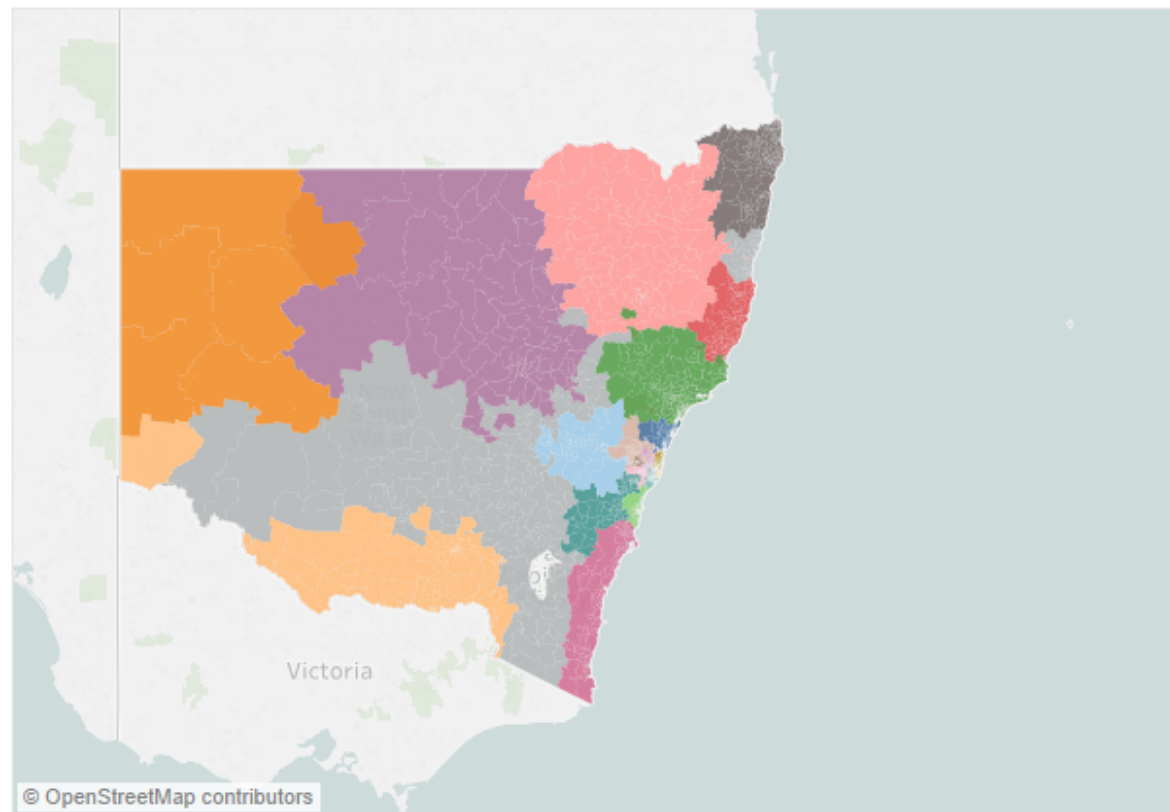
List of CLCs

Click on one or more CLCs in the list below to view further information in the maps (use ctrl+click to select multiple CLCs). Reset the options by clicking in the white space.

- Central Coast Community Legal Centre
- Elizabeth Evatt Community Legal Centre
- Far West Community Legal Centre
- Hume Riverina Community Legal Service
- Hunter Community Legal Centre
- Illawarra Legal Centre
- Inner City Legal Centre
- Kingsford Legal Centre
- Macarthur Legal Centre
- Marrickville Legal Centre
- Mid North Coast Community Legal Centre
- North and North West Community Legal Service
- Northern Rivers Community Legal Centre
- Redfern Legal Centre
- Shoalcoast Community Legal Centre
- South West Sydney Legal Centre
- Western NSW Community Legal Centre
- Western Sydney Community Legal Centre - Parramatta Branch
- Western Sydney Community Legal Centre - Rooty Hill Branch
- Western Sydney Community Legal Centre - Windsor Branch
- No Generalist Community Legal Centre

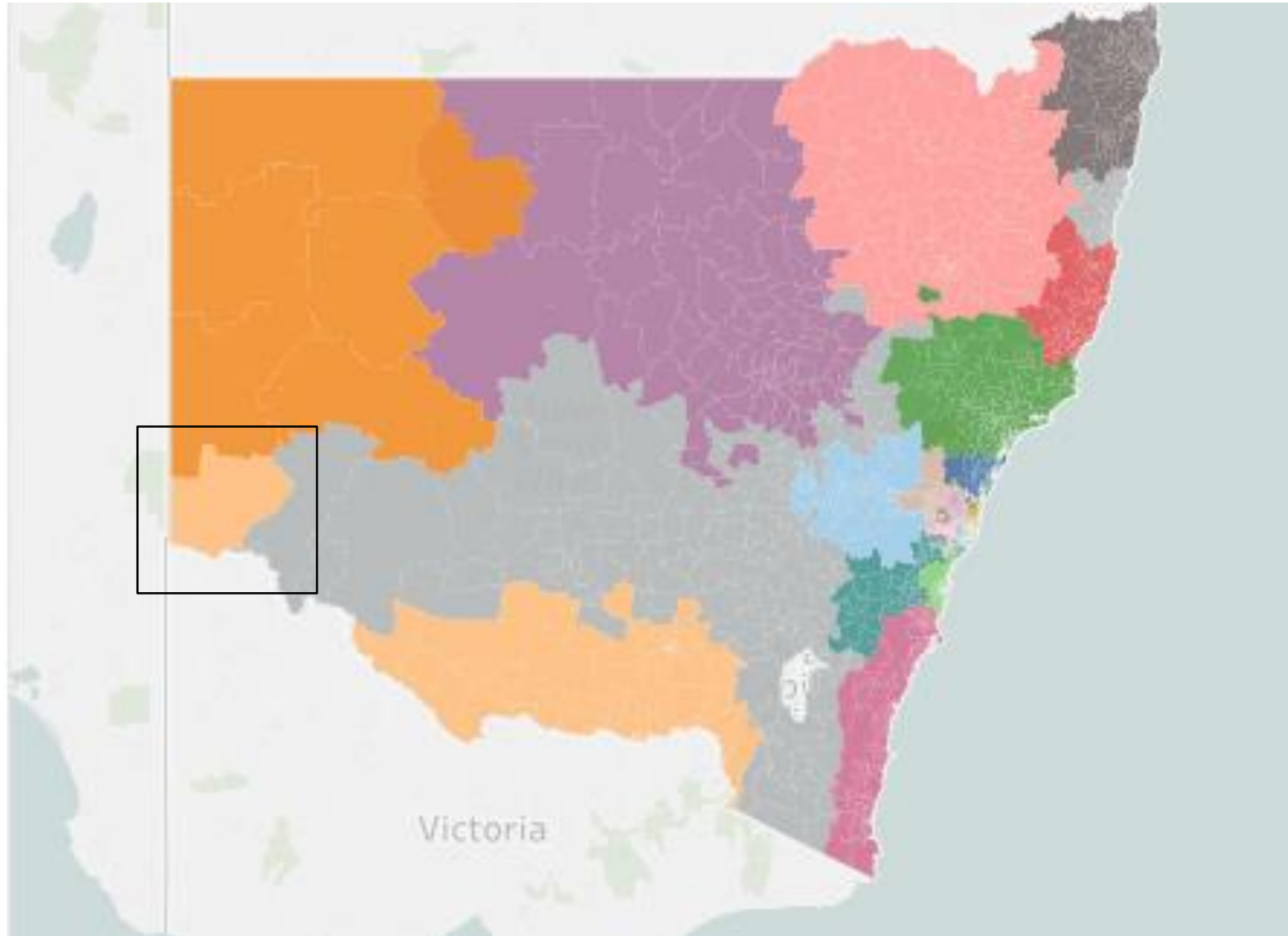
CLC centre coverage by suburb

Map is interactive. To move around within a zoomed section of the map, select the arrow in the toolbox on the left hand side of the screen and use the tools there. The 'Square' with the magnifying glass zooms in, the 'Cross' icon lets you move the map, the 'Home' icon resets the map zoom. To reset the map click outside NSW.





First draft map on Tableau Public





Finalising the areas

- Following feedback from centres and CLCNSW:
 - The Foundation made updates and finalised the catchment areas
 - Final map files were created by the LJF and provided to the CLC Review as part of CLCNSW submission for the state government review of community legal centres



Change
from
this...

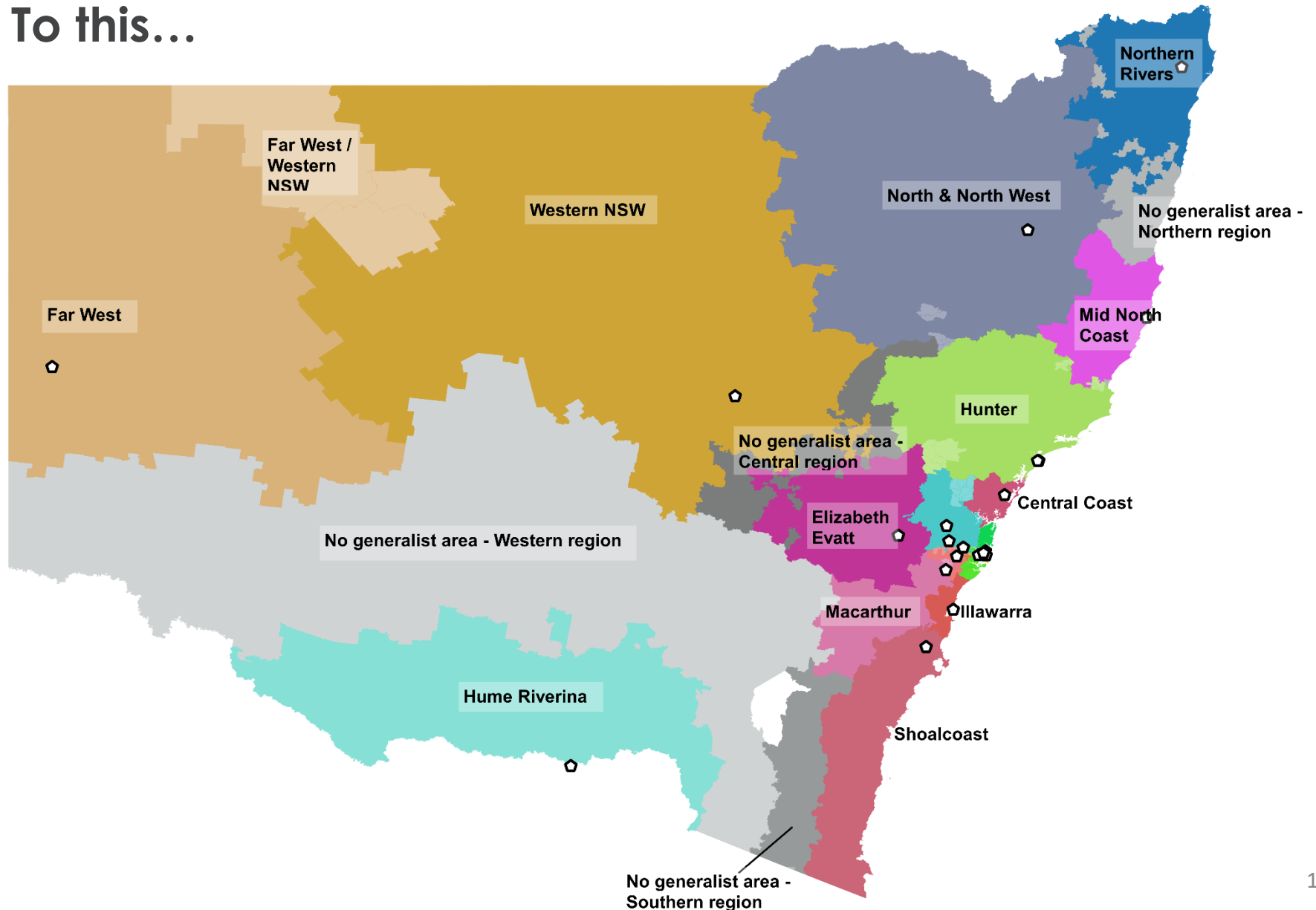
1	2016 Suburb	CLC catchment
2	Aarons Pass	Western NSW CLC
3	Abbotsbury	South West Sydney LC
4	Abbotsford (NSW)	Marrickville LC
5	Abercrombie	Elizabeth Evatt CLC
6	Abercrombie River	Elizabeth Evatt CLC
7	Aberdare	Hunter CLC
8	Aberdeen (NSW)	Hunter CLC
9	Aberfoyle	North & North West CLS
10	Aberglasslyn	Hunter CLC
11	Abermain	Hunter CLC
12	Abernethy	Hunter CLC
13	Abington (NSW)	North & North West CLS
14	Acacia Creek	Northern Rivers CLC
15	Acacia Gardens	Western Sydney CLC
16	Adaminaby	No Generalist CLC - Western region
17	Adamstown	Hunter CLC
18	Adamstown Heights	Hunter CLC
19	Adelong	Hume Riverina CLS
20	Adjungbilly	No Generalist CLC - Western region
21	Afterlee	Northern Rivers CLC
22	Agnes Banks	Western Sydney CLC
23	Airds	Macarthur LC
24	Akolele	Shoalcoast CLC
25	Albert	Western NSW CLC
26	Albion Park	Illawarra LC
27	Albion Park Rail	Illawarra LC
28	Albury	Hume Riverina CLS
29	Aldavilla	Mid North Coast CLC
30	Alectown	Western NSW CLC
31	Alexandria	Redfern LC
32	Alfords Point	Marrickville LC
33	Alfredtown	Hume Riverina CLS
34	Alice	Northern Rivers CLC
35	Alison (Central Coast - NSW)	Central Coast CLC
36	Alison (Dungog - NSW)	Hunter CLC
37	Allambie Heights	Inner City LC
38	Allandale (NSW)	Hunter CLC
39	Allawah	Marrickville LC
40	Alleena	No Generalist CLC - Western region
41	Allomera	No Generalist CLC - Northern region
42	Allworth	Hunter CLC
43	Allynbrook	Hunter CLC
44	Alma Park	Hume Riverina CLS
45	Alpine	Macarthur LC
46	Alstonvale	Northern Rivers CLC
47	Alstonville	Northern Rivers CLC
48	Alumy Creek	Northern Rivers CLC
49	Amaroo (NSW)	No Generalist CLC - Central region
50	Ambarvale	Macarthur LC
51	Amnsfield	North & North West CLS

+ over 4,000 more rows

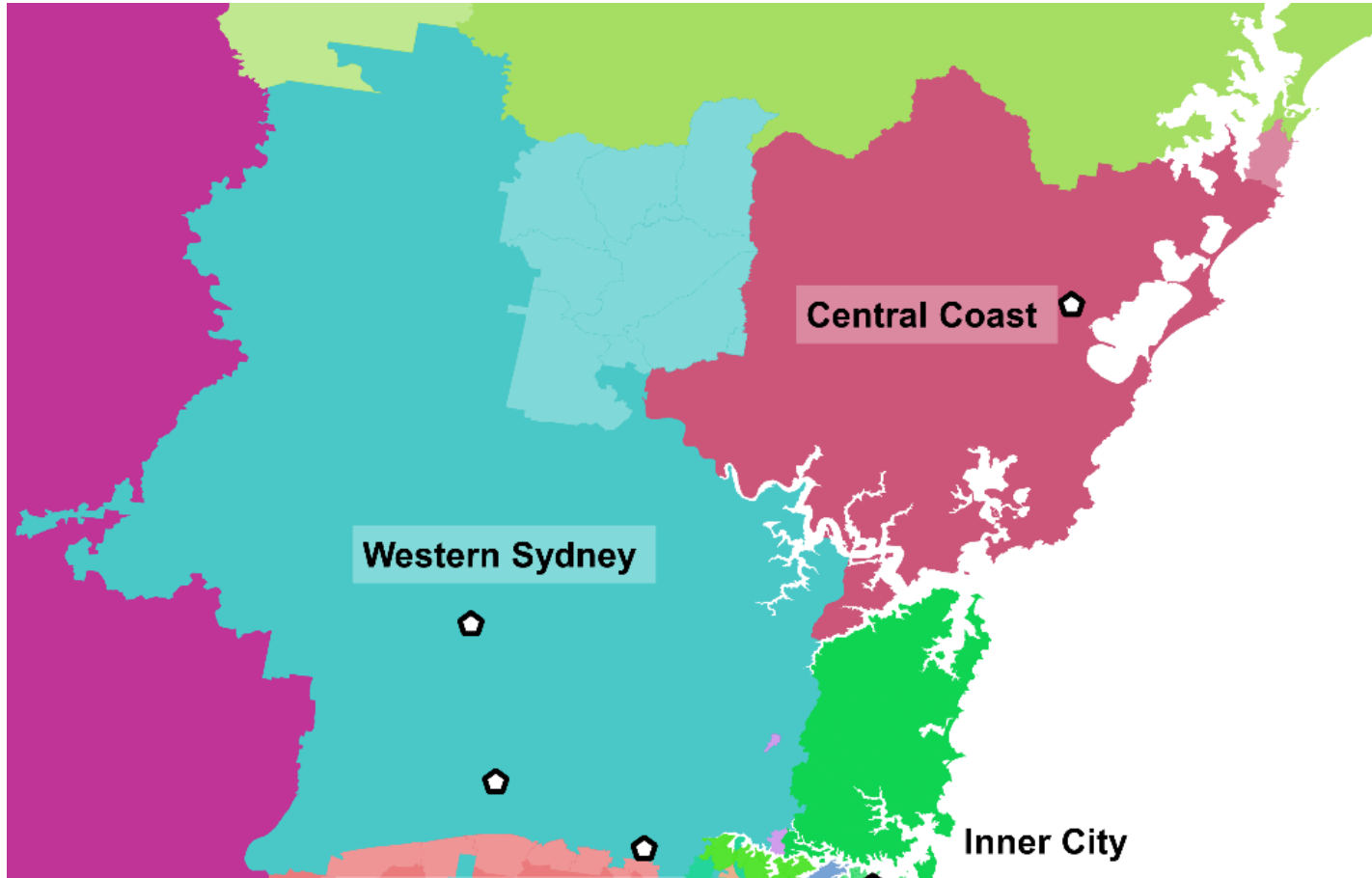




To this...









Population distribution by centre

Catchment	Total population
Western Sydney CLC	1,542,545
Marrickville LC	933,715
Inner City LC	710,070
Hunter CLC	653,610
South West Sydney LC	552,945
No Generalist CLC	352,725
<i>No Generalist CLC - Central region</i>	<i>13,830</i>
<i>No Generalist CLC - Northern region</i>	<i>111,745</i>
<i>No Generalist CLC - Southern region</i>	<i>65,930</i>
<i>No Generalist CLC - Western region</i>	<i>161,215</i>
Macarthur LC	352,480
Central Coast CLC	333,430
Illawarra LC	293,515
Northern Rivers CLC	284,415
Redfern LC	231,950
Elizabeth Evatt CLC	195,975
Hume Riverina CLS	186,900
North & North West CLS	179,600
Kingsford LC	174,400
Shoalcoast CLC	173,845
Mid North Coast CLC	157,730
Western NSW CLC	138,515
Far West CLC	20,225



How was this work used by CLCNSW?

- Maps were submitted to a NSW government review of NSW community legal centres
- Replacement of directory: new CLCNSW app

Community Legal Centres NSW Recommendation Service



This app will ask you a few questions to direct you to community legal centres that are suitable for your situation.



What did we learn?

- Defining areas can be challenging!
- A new geography to work with
- A useful process in helping to define areas for service delivery and centre coverage
- Opportunity to find a new way of presenting an existing dataset
- Informed work for the legal needs analysis resource



Thank you!