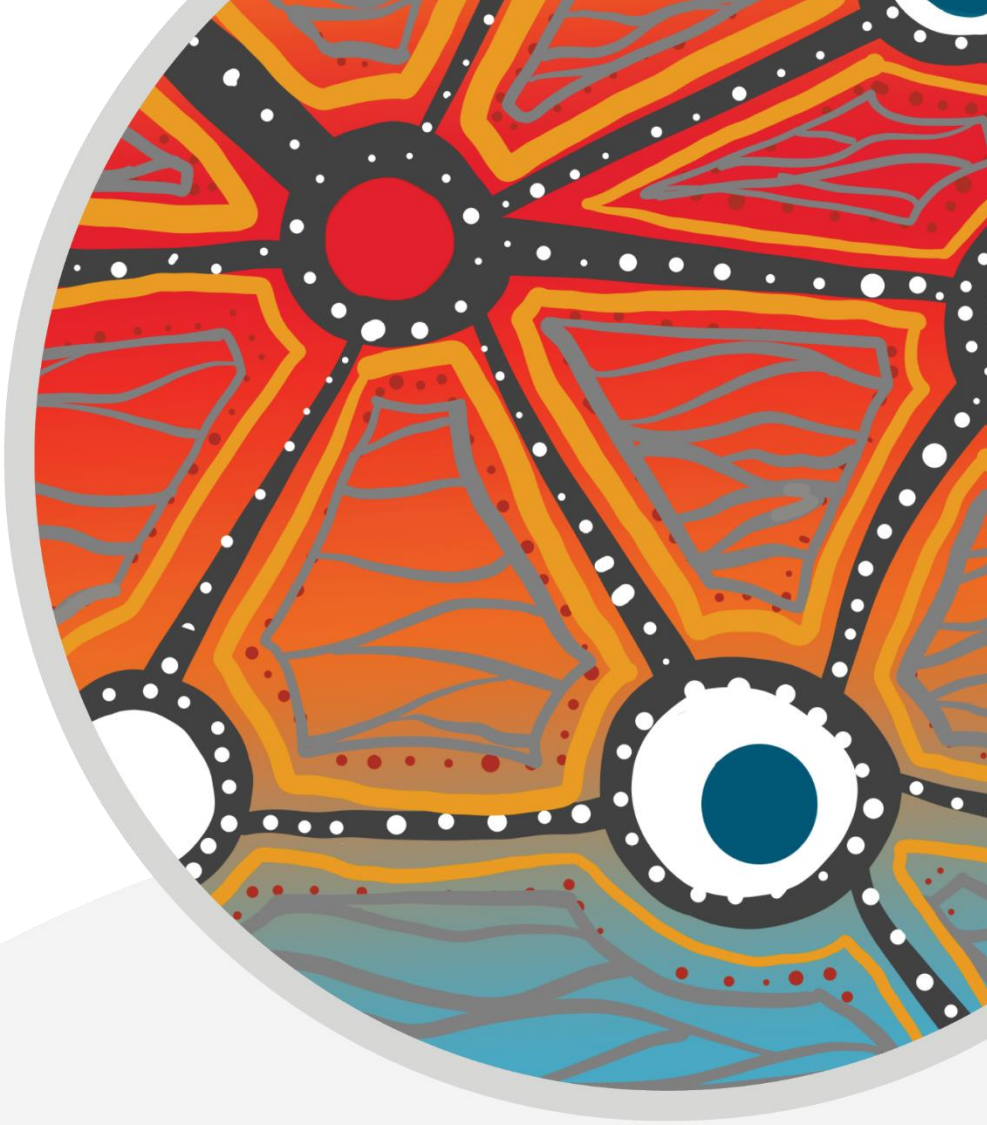
CONSULTANTS



FUTURE DIRECTIONS FOR SOCIAL HOUSING IN NSW: SERVICE IMPROVEMENT INITIATIVES

APPENDICES TO OUTCOMES AND ECONOMIC EVALUATION

DEPARTMENT OF COMMUNITIES AND JUSTICE

VOLUME 2: APPENDICES TO THE FINAL EVALUATION REPORT

10 MAY 2023

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APPENDIX 1 PROGRAM LOGICS

FIGURE A1. PROGRAM LOGIC FOR RENT CHOICE

PROGRAM LOGIC FUTURE DIRECTIONS – Service Improvement Initiatives: PRIVATE RENTAL ASSISTANCE – Rent Choice Products

1. PROBLEM	2. EVIDENCE	3. PROGRAM: Core Components & Example Activities	4. MECHANISMS OF CHANGE	5. OUTPUTS & CLIENT OUTCOMES (organised in relation to the NSW Human Services Outcome Framework Domains)			
				Immediate Outputs & Implementation Outcomes	**Short-term Outcomes (1-2 years)** (outcome measure)	**Intermediate Outcomes (3-5 years)** (outcome measure)	**Long-term Outcomes (6+ years)** (outcome measure)
• Large gap between rental costs for social housing and private rental can be too daunting • Limited or non-existent rental histories are a barrier to social housing clients securing private rental • Poor knowledge of the rental market or rental process is a barrier to social housing clients securing and maintaining private rental tenancies • Vulnerable populations sometimes need support to exit/ avoid social housing due to personal, health or financial constraints • Some domestic and family violence victims remain in emotionally &/or physically abusive relationships because they have nowhere else to go	A review of effective strategies to reduce barriers to living independently in the private market found: • Short to medium term financial assistance • Supports to build independent living skills • Support to overcome non-financial barriers to the private market SPRC Evaluation of Start Safely Private Rental Subsidy - Final Report June 2014 Independent Evaluation Youth Subsidy Demonstration project - Final Report Feb 2015 Rose Hannah's 5-year review of PRA & Rent Choice 2008-09 client cohort – prepared 2013/14 A Rent Choice implementation evaluation was completed (Dec 2018). Report and recs will be considered for implementation in early 2019. Program consolidation and product components may be adapted accordingly.	**CORE COMPONENT 1:** **Client selection & recruitment** *Example activity:* • Comprehensive referral process and selection criteria agreed by FACS & NGO **CORE COMPONENT 2:** **Support Plan development** *Example activities:* • One-on-one interview with Support Worker to identify clients' income, goals & support needs towards achieving housing independence • Plan support options to address identified barriers to housing independence • Contingency planning (to assist if the plan does not progress as planned) **CORE COMPONENT 3:** **Flexible wraparound supports (vocational & non-vocational)** *Example activities:* • Referral to/ facilitating vocational training • Referral to/ facilitating life skills education • Referral to/ facilitating work ready preparation training • Facilitating meaningful work experience opportunities • Linking clients to meaningful employment opportunities • Assisting clients to access other relevant supports identified in their Plans (eg: mental health support) • Providing financial assistance to overcome barriers to study/ work/ housing independence (eg: to pay for a car licence to be able to drive to a job interview) **CORE COMPONENT 4:** **Quarterly review & progress monitoring** *Example activities:* • Liaison with secondary providers • Client meetings • Subsidy tapering (after 12-18 months) **CORE COMPONENT 5:** **Housing-specific support** *Example activities:* • Support provider liaises with housing providers to identify and support client transition to affordable housing • Tailored subsidy levels (re: client income, regional prices, etc) • Refer clients to overcome non-financial barriers to housing independence **NOTE**: The support provider would need to demonstrate they have the capacity to provide all the identified support services OR have established relationships/ referral pathways into relevant support services	• Selection of suitably-motivated and capable clients will increase likelihood of successful engagement, outputs & outcomes • The one-on-one access to a Support Worker fosters a trusting relationship between client and support worker and increases the likelihood of clients remaining engaged in the program and achieving housing independence • Clients receive targeted and relevant supports to improve their identified needs, which optimises their likelihood of achieving housing independence • The targeted supports and financial assistance reduces barriers to training/ workforce participation, which improves the likelihood of the client achieving housing independence • Providing housing support to clients assists them to access suitable housing to transition to housing independence	**Reach & Uptake** • Number & characteristics of clients offered/ agree/ decline/ refused Rent Choice suite of products **Outputs** • Number & characteristics of clients identifying an appropriate private rental property Number of participants and attendance & completion rates for: • Engaging with relevant support services (eg: health, drug & alcohol, mental health) • Undertaking relevant non-vocational education (eg: life skills, driving lessons) • Undertaking Compliance Certificate courses (eg: Responsible Service of Alcohol, Working Children Check, White Card) • Undertaking relevant vocational education (eg: Certificates, trade qualifications) • Undertaking relevant tertiary education (ie: university) • Volunteering &/or undertaking work experience **Implementation Outcomes** • Implementation quality • Barriers & facilitating factors • Activity costs & resources • Participant experience	**HOME**		
					Transition out/ Avoidance of social housing HOMES admin measure re: number participants who didn't enter or exited social housing (with or without rental subsidy/ discounting)	Rent Choice clients continue to build capacity to independently maintain private rental tenancies	Rent Choice clients demonstrate capacity to independently secure and maintain private rental tenancies
					Progress towards fully independent housing (HOMES admin measure of level of rental subsidy/discount received)		(HOMES admin measure of length of time without return for social housing support)
					Reduced use of Specialist Homelessness Services (FACS admin measure re: nature, frequency & extent of any SHS support received)		
					SAFETY		
					Reduced exposure to domestic & family violence **Improvement in perceived personal safety** (self-report at intake & 6-monthly follow ups + staff/ stakeholder perceptions)		
					EMPLOYMENT		
					Improvement in employment status (self-reported work status at intake & 6-monthly follow ups, FTE & average hours worked + staff/ stakeholder perceptions + Centrelink admin measure re: average hours worked & employment duration)	(Centrelink admin measure re: average hours worked & employment duration & continuity)	
						Reduced dependence on welfare-related income (FACS admin measure re: amount & proportion of income from welfare sources)	
					EMPOWERMENT		
					Improvement in any identified practical barriers to training/ workforce participation (self-reported barriers at intake & 6-monthly follow ups + staff/ stakeholder perceptions)		
					Increased confidence re: **- ability to undertake training** **- work-readiness** **- general life skills** **- ability to live independently** **- hope for the future** (self-report rating at intake & 6-monthly follow ups + staff/ stakeholder perceptions)		
					EDUCATION & SKILLS		
					Improvement in highest education levels (self-report at intake & 6-monthly follow ups + staff/ stakeholder perceptions + FACS admin measure &/or DOI data for TAFE qualifications)	(FACS admin measure &/or DOI data for TAFE qualifications)	
					PHYSICAL & MENTAL HEALTH		
					Improvement in any identified physical &/or mental health barriers to training/ workforce participation (self-reported barriers at intake & 6-monthly follow ups + staff/ stakeholder perceptions)		
					Improved personal wellbeing (FACS Client Survey measure – the Personal Wellbeing Index)		
					SOCIAL & COMMUNITY		

FIGURE A2. PROGRAM LOGIC FOR OPPORTUNITY PATHWAYS

PROGRAM LOGIC	FUTURE DIRECTIONS – Service Improvement Initiatives: OPPORTUNITY PATHWAYS					
– PROBLEM	– EVIDENCE	– PROGRAM: Core Components & Example Activities	– MECHANISMS OF CHANGE	– OUTPUTS & CLIENT OUTCOMES (organised in relation to the NSW Human Services Outcome Framework Domains)		
				Diminishing Degree of DIRECT Attributability to Initiative Activities		
				Immediate Outputs & Implementation Outcomes	Short-term Outcomes (1-2 years) (outcome measure)	Intermediate Outcomes (3-5 years) (outcome measure) / Long-term Outcomes (6+ years) (outcome measure)
Low levels of workforce participation and unsustained employment amongst social housing clients, with the potential for employment. Ongoing reliance on social housing among those with capacity to achieve economic independence. **Context**: Un- or under-employment can be the result of individual and societal barriers such as: Low levels of educational attainment and training Poor literacy, numeracy and English language skills, and basic employment skills may hinder opportunities Caring responsibilities and a lack of available or affordable care options for children and family members Challenging personal situations, including physical/mental health problems, DFV, trauma, substance use, involvement with the justice system Social barriers, such as lack of role models and work culture, and negative family/peer pressure. This can be compounded by low confidence and poor networks related to	Evidence reviews and client consultations identified the following enablers & successful interventions: Voluntary, client-centred approach, with case management to identify strengths, needs and aspirations and facilitate tailored support and access to required services to help participants achieve their goals Pre-employment preparation – i.e. access to training, employment networks, assistance with job seeking skills Employment support – i.e. assistance with literacy and numeracy, English language skills, work-readiness and, basic computer	**CORE COMPONENT 1:** **Client recruitment, referral and assessment** Targeted promotion of Opportunity Pathways to target clients Comprehensive referral and assessment process to identify clients' needs, strengths, assets & work/ life goals **CORE COMPONENT 2:** **Person-centred case planning** Collaborative planning and goal setting to address identified needs &/or barriers to training/ workforce participation Providing financial assistance (brokerage) to overcome any financial barriers (e.g. childcare, transport, clothing, support services) Contingency planning (to assist if the plan does not progress as hoped) **CORE COMPONENT 3:** **Active case management** Regularly reviewing client progress – via client meetings & liaising with secondary service providers. Regular contact points will be established with the client and	Selection of suitably-motivated and capable clients will increase likelihood of successful engagement, outputs & outcomes Assessment ensures supports are aligned to clients' capacities and aspirations, facilitating appropriate support and maximising client outcomes The one-on-one case management fosters a trusting relationship between client and support worker and increases the likelihood of	**Reach & Uptake** Number & characteristics of clients offered/ agree/ decline/ refused OP. **Outputs** Number of participants and attendance & completion rates for: Engaging with relevant support services (e.g. health, drug & alcohol, mental health) Undertaking relevant pre-employment preparation (e.g. life skills, driving lessons) Undertaking Compliance Certificate courses (e.g. Responsible Service of Alcohol, Working Children Check,	**PHYSICAL & MENTAL HEALTH** **Improvement in any identified physical &/or mental health barriers to training/ workforce participation** (self-reported barriers at intake & 6-monthly follow ups + staff/ stakeholder perceptions) **Improved personal wellbeing** (FACS Client Survey measure – the Personal Wellbeing Index) **EMPOWERMENT** **Improvement in any identified practical barriers to training/ workforce participation** (self-reported barriers at intake & 6-monthly follow ups + staff/ stakeholder perceptions) **Increased confidence:** ▪ ability to undertake training ▪ work-readiness ▪ general life skills ▪ ability to live independently ▪ hope for the future (self-report rating at intake & 6-monthly follow ups + staff/ stakeholder perceptions) **EDUCATION & SKILLS** **Improvement in skills through training or education and improved work readiness** (self-report at intake & 6-monthly follow ups + staff/ stakeholder perceptions + FACS admin measure &/or DOI data for TAFE qualifications) / (FACS admin measure &/or DOI data for TAFE qualifications) **ECONOMIC** **Participants achieve and are engaged with employment, in a field or industry identified in their agreed case plan** (self-reported work status at intake & 6-monthly follow ups, FTE & average hours worked + staff/ stakeholder perceptions + Centrelink admin measure re: average hours worked & employment duration) / (Centrelink admin measure re: average hours worked & employment duration & continuity) **Reduced dependence on welfare-related income** (FACS admin measure re: amount & proportion of income from welfare sources) **HOME** **Progress towards fully independent housing** (HOMES admin measure of level of rental subsidy/discount received) / (HOMES admin measure of length of time without return for

FIGURE A3. PROGRAM LOGIC FOR THE SCHOLARSHIPS & MENTORING PROGRAM

PROGRAM LOGIC FUTURE DIRECTIONS – Service Improvement Initiatives: Scholarships and Mentoring

1. PROBLEM

- Due to low income, students living in social housing can have insufficient resources to purchase equipment/tools that are necessary to meaningfully engage in education (school, university or TAFE)
- This can be a contributing factor to low school completion rates and low levels of education among students living in social housing
- Students living in social housing can have low self-esteem and/or emerging mental health issues, which can prevent them from meaningfully participating in their education
- Students living in social housing can under-value the importance of education
- Students living in social housing can feel socially isolated and unsupported in their pursuit of education

2. EVIDENCE

- Rhodes, J. 2008. Improving Youth Mentoring Interventions Through Research-based Practice
- DuBois, D. et al. 2002. Effectiveness of Mentoring Programs for Youth: A Meta-Analytic Review
- Tolan, P. 2013. Mentoring programs to affect delinquency and associated outcomes of youth at risk: A comprehensive meta-analytic review
- ARTD Evaluation of Housing NSW Youth Scholarship - Final Report June 2008
- FACSAR Evaluation of Teenage Education Payment - Final Report October 2015
- Inca Consulting, Enhancing Education and employment outcomes for social housing tenants, Evaluation of three demonstration projects (Grants for Graduation): final report March 2016
- Youth Frontiers Evaluation, Final Report, September 2016

3. PROGRAM: Core Components & Example Activities

CORE COMPONENT 1:
Recipient selection & recruitment

Example activities:

- Scholarship selection criteria
- Mentoring referral process and selection criteria agreed by FACS & NGO

CORE COMPONENT 2:
One-off financial assistance

Example activities:

- Scholarships for study needs ($1000/year for up to 7 years)

CORE COMPONENT 3:
Annual review & progress monitoring

Example activity:

- Annual reapplication process
- Review of linked administrative data

ADDITIONAL Components for Piloting

CORE COMPONENT 4:
Motivational mentoring

Example activities:

- Suitable mentors recruited & trained
- Effective matching process that matches students with appropriate mentors
- Orientation, training & ongoing support for mentors & mentees
- Specified, regular mentor-mentee contact over 2-3 school terms
- Education-oriented goal-setting
- Employment-oriented goal-setting

CORE COMPONENT 5:
Wellbeing-promoting support activities

Examples of activities:

- Daily meditation groups
- Daily mindfulness activities
- Anger management techniques
- Role-playing (to promote positive coping techniques)
- One-on-one counselling with mentor (or other trained professional) if needed
- Team work activities and/or group excursions

CORE COMPONENT 6:
Capacity-building support activities (vocational & non-vocational)

4. MECHANISMS OF CHANGE

- Selection of suitably-motivated and capable students will increase likelihood of successful outcomes
- Reducing financial barriers increases the likelihood that the student will be able to better engage with educational activities, feel less social stigma and have higher self-confidence, which improves the likelihood that they will be able to successfully complete their year of education (school, university or TAFE)
- Supportive, trusting mentee-mentor relationships promote improved social-emotional wellbeing/ resilience and empower students to understand & engage with opportunities
- Diversionary activities reduce the opportunity for students to be exposed to high-risk situations & improve their capacity to cope in high-risk situations and make positive life choice
- Supporting students to set and pursue education goals increases their likelihood of completing school
- Improving students' education & life skills increases their future opportunities for meaningful participation in further education & employment
- Supporting students to set & work towards employment goals increases their likelihood of accessing meaningful employment

5. OUTPUTS & CLIENT OUTCOMES

Immediate Outputs & Implementation Outcomes

Reach & Uptake

- Number & characteristics of students offered/ agree/ decline/ refused scholarship &/or mentoring

Outputs – General

- % of scholarship funds spent
- Annual reapplication & scholarship extension rates, by education level

Number of students and attendance rates for:

- Continuing school education (ie: Years 10,11 & 12)
- Undertaking non-vocational education (eg: life skills, driving lessons)
- Undertaking Compliance Certificate (eg: Working with Children Check, Responsible Service of Alcohol, White Card)
- Undertaking vocational education (eg: Certificates, trade qualifications)
- Undertaking tertiary education (ie: university)
- Volunteering &/or undertaking work experience

Outputs – Pilot

Number of students engaging with & attendance rates for:

- Motivational mentoring
- Wellbeing-promoting support activities
- Capacity-building support activities

Implementation Outcomes

- Implementation quality
- Barriers & facilitating factors
- Activity costs & resources

Short-term Outcomes (1-2 years) (outcome measure)

EMPOWERMENT

Improvement in students' educational & employment aspirations
(self-report rating on initial & annual reapplication + mentor & mentee perceptions)

Increased confidence re:
- capacity/ likelihood of achieving educational goals
- capacity/ likelihood of achieving employment goals
- ability to undertake training
- work-readiness
- general life skills
- ability to live independently
- hope for the future

(self-report rating on initial & annual reapplication + mentor & mentee perceptions)

EDUCATION & SKILLS

Improvement in school completion rates
(FACS admin measure, via annual application form &/or DET data for Yr 10, 11 & 12 completions)

PHYSICAL & MENTAL HEALTH

Improvement in students' self-esteem, resilience & social competencies
(self-report rating on initial & annual reapplication + mentor & mentee perceptions)

EMPLOYMENT

HOME

SAFETY

Intermediate Outcomes (3-5 years) (outcome measure)

Improvement in highest education levels
(FACS admin measure, via annual application form &/or DOI data for TAFE qualifications)

Improved personal wellbeing
(FACS Client Survey measure – the Personal Wellbeing Index)

Improvement in employment status
(self-reported work status on initial & annual reapplication, FTE & average hours worked + Centrelink admin measure re: average hours worked & employment duration)

Reduced dependence on welfare-related income
(FACS admin measure re: amount & proportion of income from welfare sources)

Transition out/ Avoidance of social housing
(HOMES admin measure re: number participants who didn't enter or exited social housing (with or without rental subsidy/ discounting))

Long-term Outcomes (6+ years) (outcome measure)

APPENDIX 2 KEY EVALUATION QUESTIONS

Service Improvement Initiative	Key evaluation question
Rent Choice	• How well is Rent Choice reaching and engaging its target population? • What outcomes are being achieved by clients and what degree of variability are there in these outcomes? • What evidence is there to confirm hypotheses about key mechanisms (including particular products or services) by which the program works? What features or context determine if they work, and for which type of clients do they work best? • What factors[1] predict if a client is likely to afford the rent during the subsidy period? • When and for whom does the subsidy taper lead to sustainable private rental tenancies? • How do clients experience the program? • What implications can be drawn from the outcomes, including 'validation' and contextualisation of findings with clients and communities? • What have been the costs and benefits of assisting clients with the program? • What is the likely cost effectiveness in terms of key housing related outcomes of delivering Rent Choice to those that most stand to benefit (that is, those for whom the outcomes analysis suggests it is most likely to be effective?)
Opportunity Pathways	• How well is Opportunity Pathways reaching and engaging its target population? • What outcomes are being achieved by clients and what degree of variability are there in these outcomes? • What evidence is there to confirm hypotheses about key mechanisms (including particular products or services) by which the program works, what features, or context determine if they work, and for which type of clients do they work best? • How do clients experience the program? • What implications can be drawn from the outcomes, including 'validation' and contextualisation of findings with clients and communities? • What have been the costs and benefits of assisting clients with the program?
Youth Development Scholarships	• How well is Youth Development Scholarships reaching and engaging its target population?

[1] This will include a discussion of both abstract 'factors' or features of context and causal 'mechanisms' as well as concrete 'factors' such as information that may exist in administrative data; for example, in the Application For Housing Assistance form.

Service Improvement Initiative	Key evaluation question
	• What outcomes are being achieved by clients and what degree of variability are there in these outcomes? • What evidence is there to confirm hypotheses about key mechanisms (including particular products or services) by which the program works, what features, or context determine if it works, and for which type of clients does it work best? • How do clients experience the program? • What implications can be drawn from the outcomes, including 'validation' and contextualisation of findings with clients and communities? • What have been the costs and benefits of assisting clients with the program?

APPENDIX 3 QUANTITATIVE METHODS

A3.1 RENT CHOICE

LINKED ADMINISTRATIVE DATASET

A key feature of the quantitative analysis is the use of a comprehensive, linked administrative dataset to evaluate outcomes for participants. This was constructed for the purposes of evaluating Future Directions, which includes the Service Improvement Initiatives as well as the Social and Affordable Housing Fund (SAHF), Social Housing Management Transfers (SHMT) and Land and Housing Corporation (LAHC) Future Directions initiatives. This dataset has multiple contributing sources as shown in Table A1.

TABLE A1. SUMMARY OF THE LINKED ADMINISTRATIVE OUTCOMES DATASET

Source	Data	Data start date	Data end date
Department of Communities and Justice (DCJ) Housing Operations Management and Extended Services (HOMES)	Applications for Housing Assistance (AHAs)	Dec-10	Jun-21
	Social Housing Register (HR)	Jul-10	Jun-21
	Social housing tenancies	Jul-10	Jun-21
	Private Rental Assistance (PRA)	Jul-10	Jun-21
	PRA summary	Jul-10	Jun-21
DCJ Community Housing Information Management System (CHIMES)	Community housing tenancies	Jul-10	Jun-21
DCJ Client Information Management System (CIMS)	Specialist Homelessness Services (SHS)	Jul-10	Jun-21
DCJ program level data	Opportunity Pathways program	Jan-19	Jun-21
	Career Pathways program	Jul-16	Jun-20
	Scholarships program	Jul-16	Jun-21
DCJ Housing Outcomes and Satisfaction (HOSS) data	Housing Outcomes Satisfaction Survey	Jan-19	Dec-21
NSW Bureau of Crime Statistics and Research (BOCSAR)	Court finalisations for proven offence	Jan-10	Jun-21
	Custody spells	Jan-10	Jun-21
NSW Ministry of Health	Admitted patient dataset collection	Jul-10	Jul-21
	Emergency department data collection	Jul-10	Jul-21

Source	Data	Data start date	Data end date
	Mental health (MH) ambulatory data collection	Jul-10	Jun-21
NSW Department of Education	School enrolments	Jan-10	Dec-20
	School attendance	Jan-18	Dec-20
	ATAR achievement	Jan-10	Dec-20
National Centre for Vocational Education Research (NCVER)	NCVER course completion	Jan-18	Dec-20
	NCVER module enrolment	Jan-18	Dec-20
Commonwealth Department of Social Services Data Over Multiple Individual Occurrences	Welfare payment history	Jan-07	Jun-21
	Welfare benefit status	Jan-07	Jun-21

ANALYSIS DESIGN

There are challenges in establishing a suitable comparison group (or counterfactual) to measure the impact of Rent Choice. Such challenges include:

- **Potentially large selection effects.** Rent Choice suitability is ultimately decided by a DCJ customer service officer, who recognises applicant characteristics not visible on the main application, such as motivation for employment. This means the matching methods based on the administrative data available cannot fully reproduce the selection of clients for Rent Choice.
- **Gaps in the data.** For example, household income is collated from different sources and not always available. This reduces the accuracy of the propensity matching.
- **Interaction with other housing supports.** Those who do not receive Rent Choice receive other forms of support. For example, they may be housed in social housing. Social housing provides a secure tenancy and people in social housing likely experience improved outcomes. However, social housing stock is limited and must be prioritised. Therefore, a Rent Choice recipient may not have been able to enter social housing in the absence of Rent Choice due to the limited stock. There is no single support pathway a person would have received in the absence of Rent Choice. This makes it challenging to estimate what would have happened in the absence of Rent Choice.

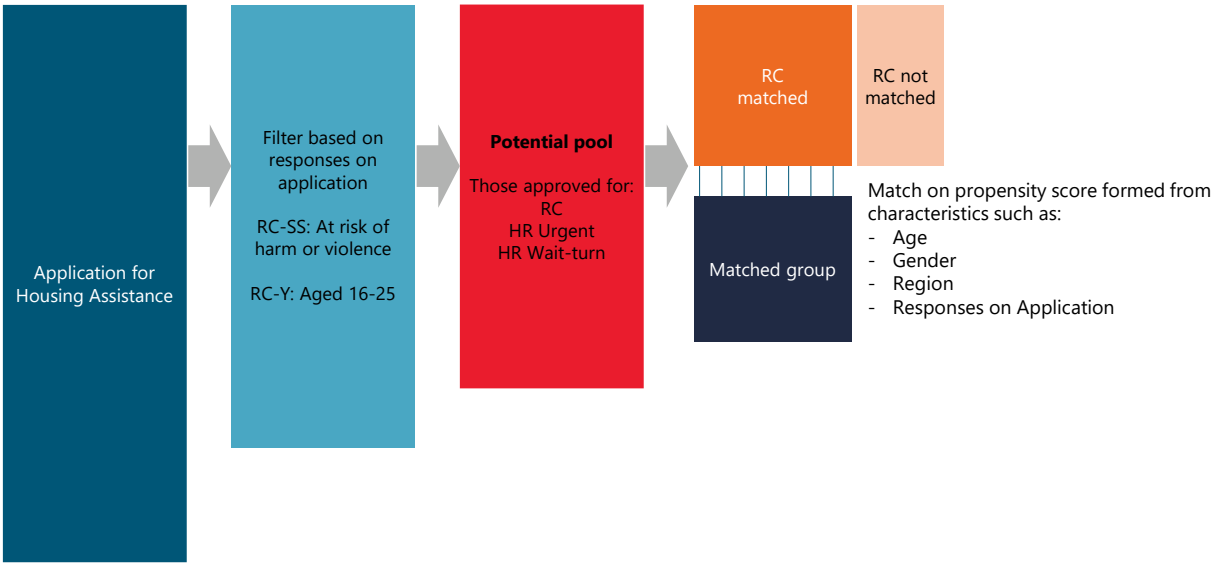
For the linked data analysis, we draw comparisons between the recipient and matched comparison groups for Rent Choice Start Safely and Rent Choice Youth:

- Participants – those who raised an application prior to 30 June 2019 that resulted in a Rent Choice activation.
- Comparison using propensity matching – a matched subset from those who applied for assistance over 2017–2019.

The linked data extracts on housing run to 30 June 2021. We restrict to applications prior to 30 June 2019 as this means we have at least a two-year period to observe outcomes for all participants (and members of the comparison groups).

Figure A4 depicts the basic set-up for the propensity matching used to form the comparison.

FIGURE A4. SET-UP FOR PROPENSITY MATCHED COMPARISON GROUPS



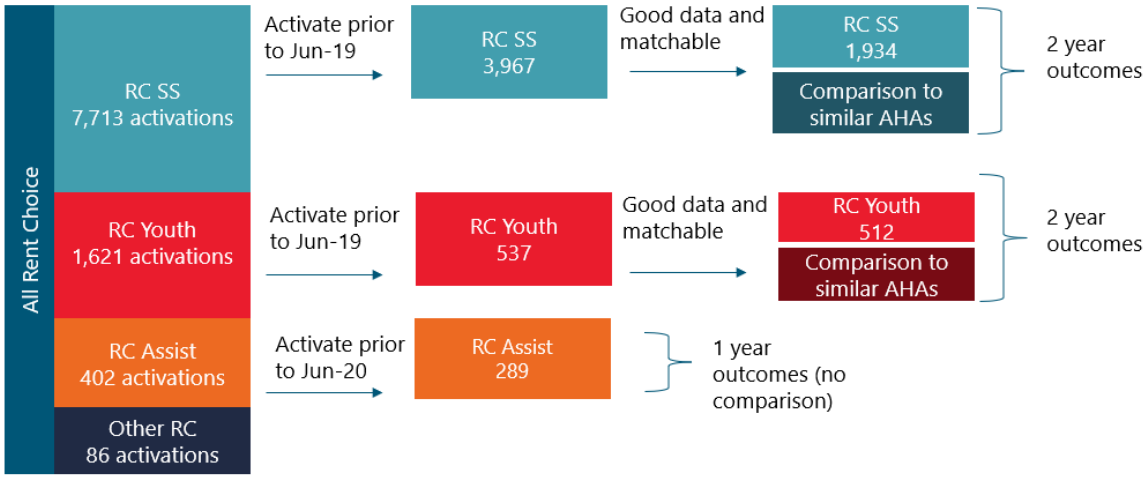
We have taken all AHAs, filtered to those meeting basic program eligibility and those for whom the application was either being approved for Rent Choice or the HR (wait-turn or urgent). We then use the variables available to model the likelihood of the person activating Rent Choice based on their characteristics and application. This model is used to find a comparison group who did not receive Rent Choice, but who look 'similar' in terms of their likelihood of receiving Rent Choice to those that did receive Rent Choice. There is not always a match for all people in the participant pool. This is particularly true for Rent Choice Start Safely, where the income thresholds for eligibility are higher than for social housing. We exclude people without a match to the comparison to ensure a like-for-like comparison.

For the comparison groups, we have included clients who have:

- raised an application for the subsidy but have not been approved, *or*
- been approved for the subsidy but have not activated, *or*
- activated the subsidy before 30 January 2019 but have not received a payment – we have assumed that these clients did not proceed with a rental.

A summary of the numbers in the recipient groups is provided in Figure A5.

FIGURE A5. SUMMARY OF RECIPIENT AND COMPARISON GROUPS FOR RENT CHOICE



We have excluded applications that were approved for other products such as:

- Private rental subsidies (not Rent Choice). This would create a comparison group that had received a similar service. Only a small proportion of applications are approved for other private rental subsidies (for example, applications are 57 times more likely to result in a waitlist application).
- Temporary Accommodation (TA). TA is designed to meet a gap in the service system by providing a short-term accommodation response for people without complex needs while they arrange more suitable longer-term accommodation. Those with ongoing needs may return and make a new AHA, which is then approved to the HR. This new application would be included in the pool.
- Link2home referral. As with TA, this reflects a distinct support need. Those with ongoing needs may return and make a new AHA, which is then approved to the HR. This new application would be included in the pool.

The propensity match is based on a generalised linear model (GLM) predicting whether an application will result in activation of Rent Choice. This was carried out for Rent Choice Start Safely and Rent Choice Youth separately. As a preliminary step to indicate the level of achievable prediction accuracy, we fit a Gradient Boosted Machine (GBM) model. This also provides an easy way to assess the relative importance of each variable in the model. Figure A6 shows the importance of each variable for predicting Rent Choice Start Safely activation and Rent Choice Youth activation. This model was restricted to details on the AHA and HOMES database, rather than broader linked data.

The key predictors for both the Rent Choice Start Safely propensity model and Rent Choice Youth propensity model are household income and district, as shown in Figure A6.

FIGURE A6. IMPORTANCE OF EACH VARIABLE FROM GBM MODEL PREDICTING ACTIVATION FOR RENT CHOICE START SAFELY (TOP) AND RENT CHOICE YOUTH (BOTTOM)

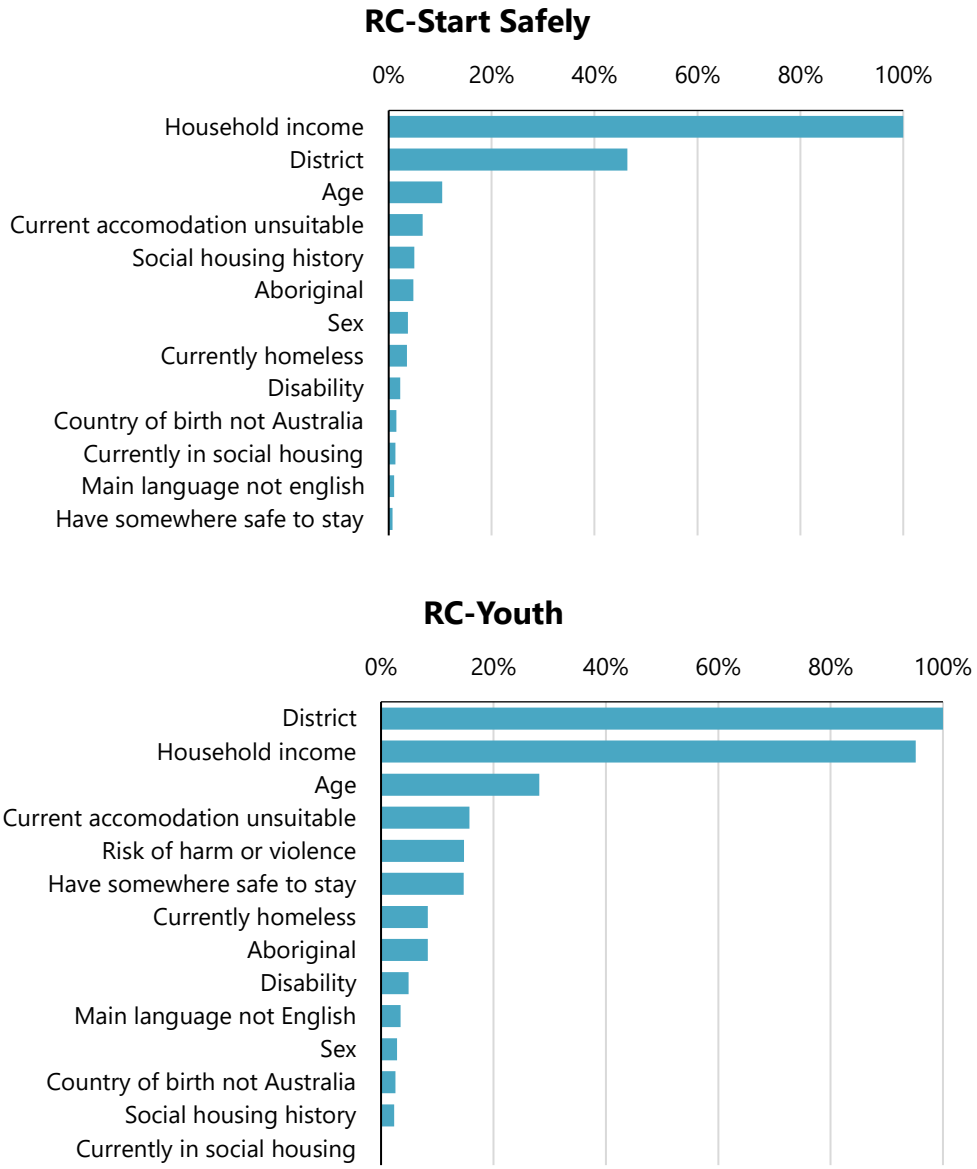


Figure A7 and Figure A8 show the impact of matching for Rent Choice Start Safely and Rent Choice Youth respectively. The matched groups are not identical, but the rate of covariates is much closer following matching. For both matches, callipers of 0.1 standard deviations were used. For Rent Choice Start Safely, there was a significant group that could not be matched. The income thresholds are higher for Rent Choice Start Safely than for social housing, meaning the distribution of household income cannot be fully matched from applications going to the waitlist.

FIGURE A7. RENT CHOICE START SAFELY, DIFFERENCE IN PROPORTION WITH COVARIATE BETWEEN FULL RECIPIENT AND COMPARISON POOL BEFORE MATCHING AND MATCHED GROUPS AFTER MATCHING

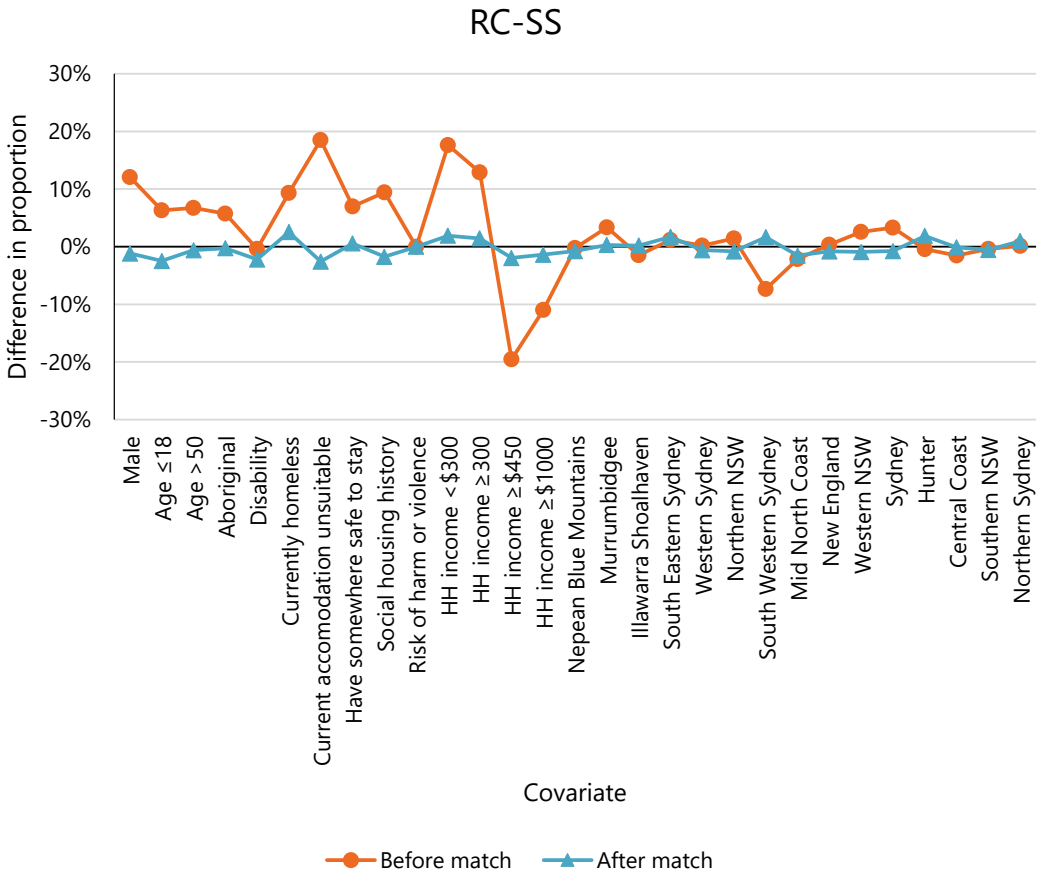


FIGURE A8. RENT CHOICE YOUTH, DIFFERENCE IN PROPORTION WITH COVARIATE BETWEEN FULL RECIPIENT AND COMPARISON POOL BEFORE MATCHING AND MATCHED GROUPS AFTER MATCHING, WITH 95% CONFIDENCE INTERVAL

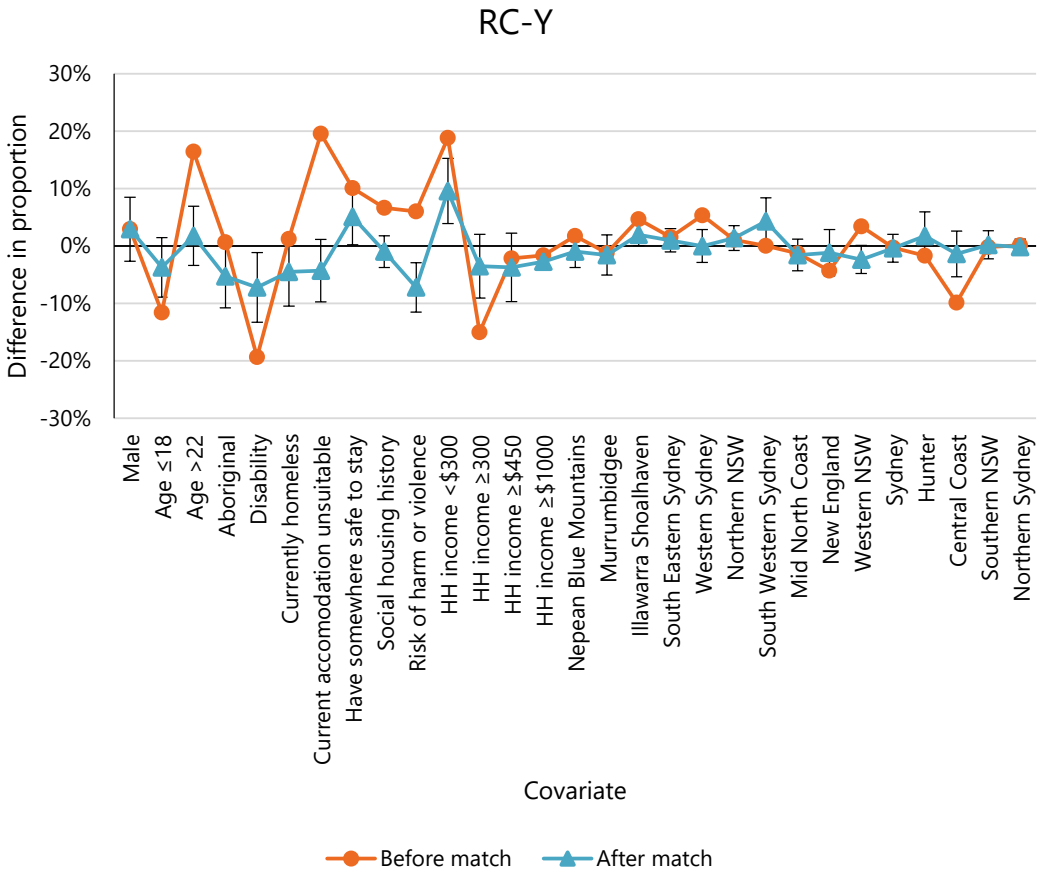
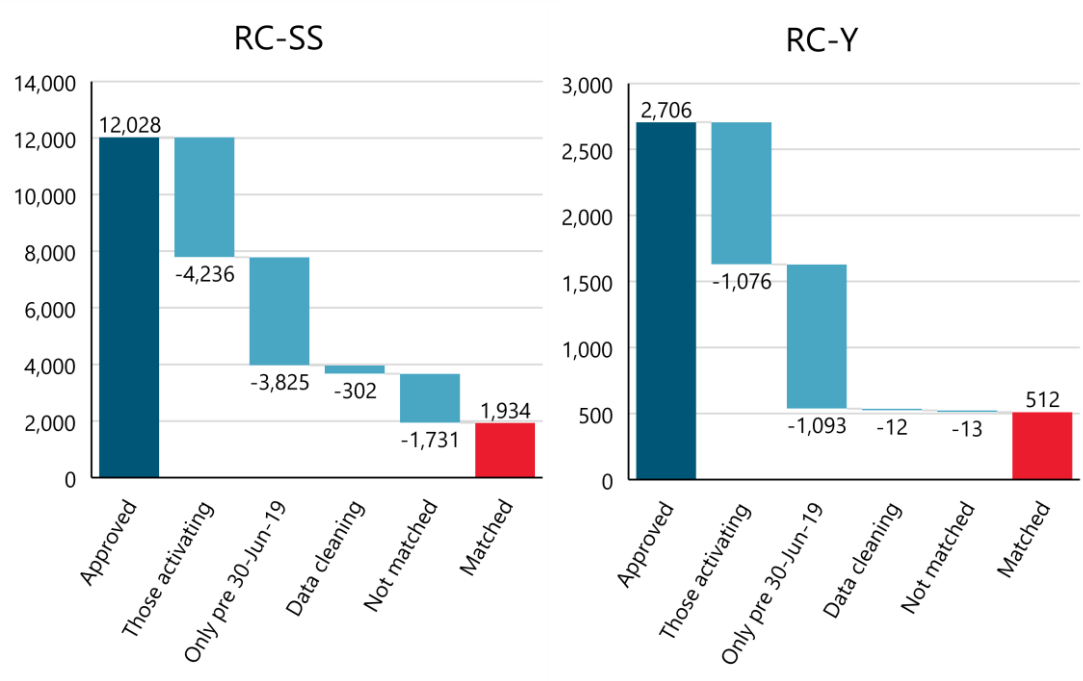


Figure A9 shows the breakdown of the number of approved applications through to the number of people in the recipient groups.

FIGURE A9. BREAKDOWN OF NUMBERS OF APPLICATIONS TO RECIPIENT GROUPS FOR RENT CHOICE START SAFELY AND RENT CHOICE YOUTH



For Rent Choice Start Safely, there were 12,028 applications approved to 30 June 2021. Of these, around 7,792 were activated. Of these activations:

- 3,967 were activated prior to 30 June 2019
- 1,934 have been matched to a similar application that instead went to the waitlist
- 1,731 have not been matched. The income thresholds for Start Safely are higher than those for social housing, meaning the distribution of household income cannot be fully matched with applications going to the waitlist.

For Rent Choice Youth, there were 2,706 applications approved to 30 June 2021. Of these around 1,630 were activated. Of these activations:

- 537 were activated prior to 30 June 2019
- 512 have been matched to a similar application that instead went to the waitlist
- 13 have not been matched. This group is excluded throughout the analysis because service use statistics create small subgroups, which are potentially identifiable.

These numbers likely differ to official program statistics for several reasons, including linkage processes and people making multiple applications for the same or different products.

Table A2 summarises the matched groups. While we carried out a one-to-one matching process, the recipient and comparison groups are not the same size. Some people have made multiple applications for various products spanning the 10-year window, meaning they can appear in multiple groups (for example, the Rent Choice Start Safely and Rent Choice Youth comparison groups). We have only allowed a person to be in one group, avoid double counting. This was not common but where necessary, we have prioritised allocation into Rent Choice Youth over Rent Choice Start Safely. This is to maximise numbers in the smaller Rent Choice Youth group.

TABLE A2. RENT CHOICE START SAFELY AND YOUTH MATCHED AND UNMATCHED RECIPIENT AND COMPARISON GROUP SIZES

Program	Group	Group size
Start Safely	Recipient, matched	1,934
	Recipient, unmatched	1,731
	Comparison, in-time	1,907
Youth	Recipient, matched	512
	Recipient, unmatched	13
	Comparison, in-time	512

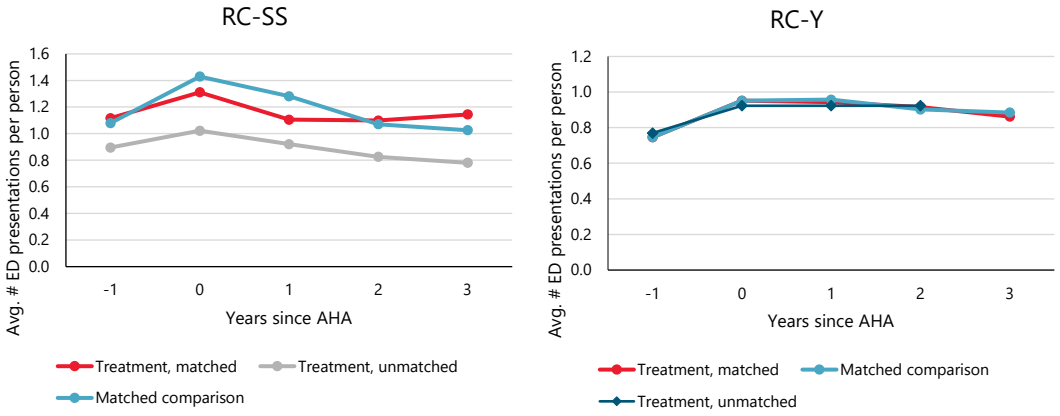
DATA PROCESSING

We are primarily considering outcomes over the first and second years following starting Rent Choice. For each person, we have defined 'year 0' or 'baseline year' to be the four quarters up to and including the quarter they applied for housing assistance. The year following is then the following four quarters.

The linked data analysis considers service use over a year as an outcome (for example, number of emergency department (ED) presentations over the year). The service use in the previous year will be a strong predictor of this. While we have matched the recipient and comparison groups based on their housing applications, they can still have differences in historical service use across different domains (for example, numerous hospital admissions or court appearances historically). While it is possible, in principle, to extend the matching to include broader service use, this may not be feasible given the size of the potential pool of applications. We did not explore this.

To illustrate some of these differences in broader service use, we first compare outcomes over time for each of the groups. 0, Figure A11 and Figure A12 show three examples.

FIGURE A10. COMPARISON OF AVERAGE NUMBER OF ED PRESENTATIONS IN THE YEAR, PER PERSON, BY YEARS SINCE AHA



0 shows the average number of ED presentations per person. It shows that for Rent Choice Start Safely:

- in the year leading up to the AHA (year 0), the average number of ED presentations was:
  - 1.3 for the matched subset of the recipient group
  - 1.4 for the matched comparison group

- in the following year, the average number dropped for all groups. It was:
  - 1.1 for the matched subset of the recipient group
  - 1.3 for the matched comparison group

- in the second year, the average was:
  - flat at 1.1 for the matched subset of the recipient group
  - lower at 1.1 for the matched comparison group.

For Rent Choice Youth, it shows that:

- in year 0, the average number of ED presentations was:
  - 1.0 for the matched subset of the recipient group
  - 1.0 for the matched comparison group

- in the following year, the average number was similar within each group. It was:
  - 0.9 for the matched subset of the recipient group
  - 1.0 for the matched comparison group

- in the second year, the average number was again similar within each group. It was:
  - 0.9 for the matched subset of the recipient group
  - 0.9 for the matched comparison group.

FIGURE A11. COMPARISON OF THE PROPORTION OF PEOPLE WITH INCOME SUPPORT PAYMENTS IN THE YEAR, BY YEARS SINCE AHA

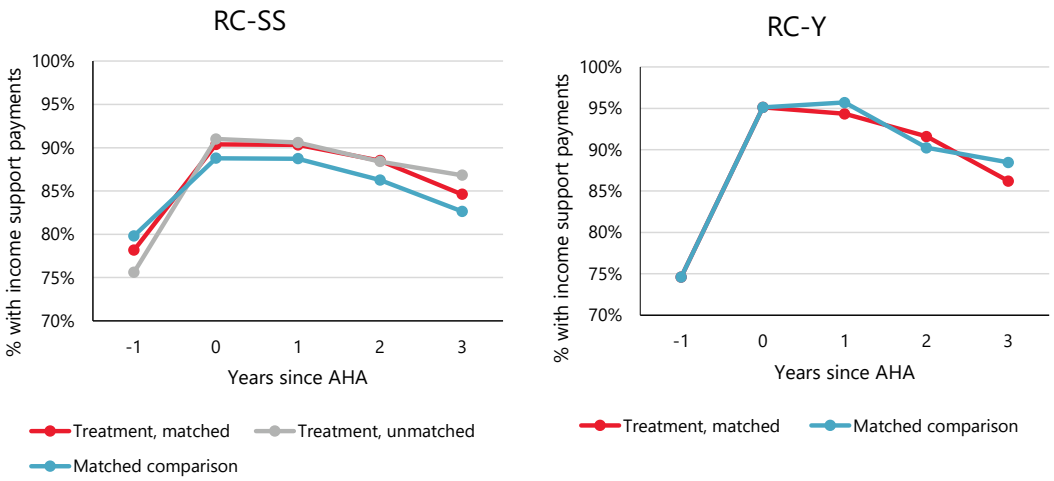


FIGURE A12. COMPARISON OF PROPORTION OF PEOPLE WITH A FINALISED COURT CHARGE IN THE YEAR, BY YEARS SINCE AHA

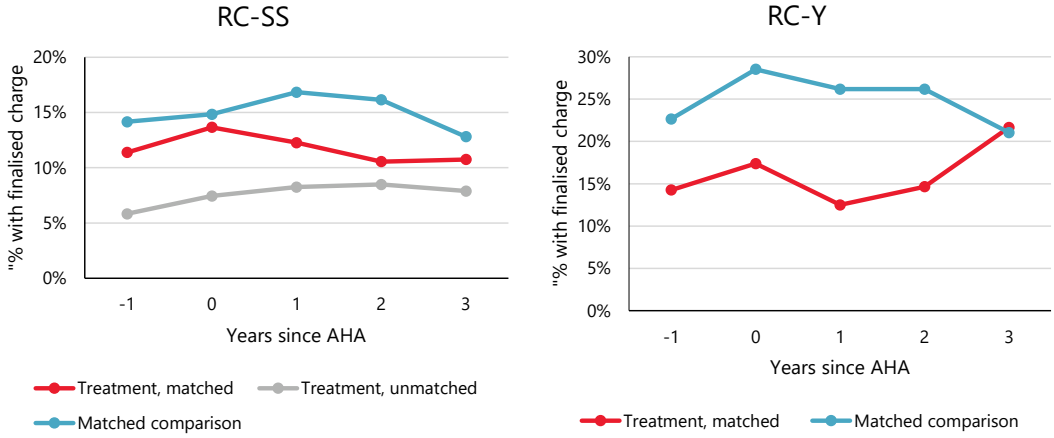


Figure A11 and Figure A12 can be interpreted in the same way as Figure A10. The proportion receiving income support is generally similarly high across all groups. The proportion with a finalised court in year 0 is similar for Rent Choice Start Safely and for the matched recipient and comparison, but lower for the unmatched group. The proportion with a finalised court charge in year 0 is 1.6 times higher for the Rent Choice Youth comparison than for the matched recipient.

In general, across the various services, there are differences in rates of service use in year 0. This will influence the rates of service use for the groups in year 1. Therefore, we use a difference in difference approach to test for changes following Rent Choice. This means we are testing whether the outcome changed more or less for Rent Choice participants than it changed for the matched group.

OUTCOME MEASURES DEFINITIONS AND MODEL PARAMETERS

The analysis described above was carried out for a range of outcome measures, which are listed in Table A3.

TABLE A3. OUTCOME MEASURES FOR RENT CHOICE

Outcome	Note
Income benefit receipt in year	Defined as being on one of the following benefits in the year: ABSTUDY AUSTUDY Carer Payment Disability Support Pension Farm Household Allowance JobSeeker Payment Newstart Allowance Parenting Payment Special Benefit Wife Pension Youth Allowance
Income benefit payments in quarter	Defined as payments received for any of the income benefits defined above in the quarter. Payments for Commonwealth Rental Assistance (CRA) have been excluded
CRA in the year	Received CRA in the year
CRA payments in the year	Total payments for CRA in the year
Ambulatory MH use in year	Use of any MH ambulatory service in the year
Public hospital ED presentations in year	Any presentation to an ED in the year
Public hospital admissions in year	Any admission to a public hospital in the year
Court finalisation for a proven offence in year	Any court finalisation for a proven offence in the year
SHS presentations in year	Any presentation to a SHS in the year
Being in public or community housing during year	In either a public housing or community housing tenancy in the year
Being on the waitlist during year	On the social housing waitlist in the year
Making an AHA in year	An AHA with any housing option raised

Table A4 and Table A5 are parameter tables for the propensity models. Both are GLMs fit to a Bernoulli outcome using a logit link function.

TABLE A4. RENT CHOICE START SAFELY PROPENSITY MODEL PARAMETER FILE

Parameter	Estimate	P-value
Intercept	-3.68	<0.01
Currently homeless	-0.25	<0.01
Age spline 16–22	0.20	<0.01
Age spline 22–50	0.01	0.01
Age spline 50–60	-0.04	0.01
Age >60	-0.44	0.02
Household income spline $250–300	2.83	<0.01
Household income spline $350–400	-1.47	<0.01
Household income spline $400–600	1.47	<0.01
Household income spline $600–1,000	1.45	<0.01
Mid North Coast	0.15	0.04
Hunter New England	0.10	0.06
Central Coast	0.24	<0.01
Illawarra Shoalhaven	0.39	<0.01
Nepean Blue Mountains	0.12	0.12
Western NSW and Far West	-0.58	<0.01
Sydney	-0.95	<0.01
Murrumbidgee	-0.61	<0.01
South Western Sydney	0.38	<0.01
Northern NSW	-0.33	<0.01
Unknown district	-0.56	<0.01
Male	-1.32	<0.01
Aboriginal	-0.36	<0.01
Current accommodation unsuitable	-0.56	<0.01
Social housing history	-0.80	<0.01
Have somewhere safe to stay	0.12	0.01
Disability	-0.20	<0.01

TABLE A5. RENT CHOICE YOUTH PROPENSITY MODEL PARAMETER FILE

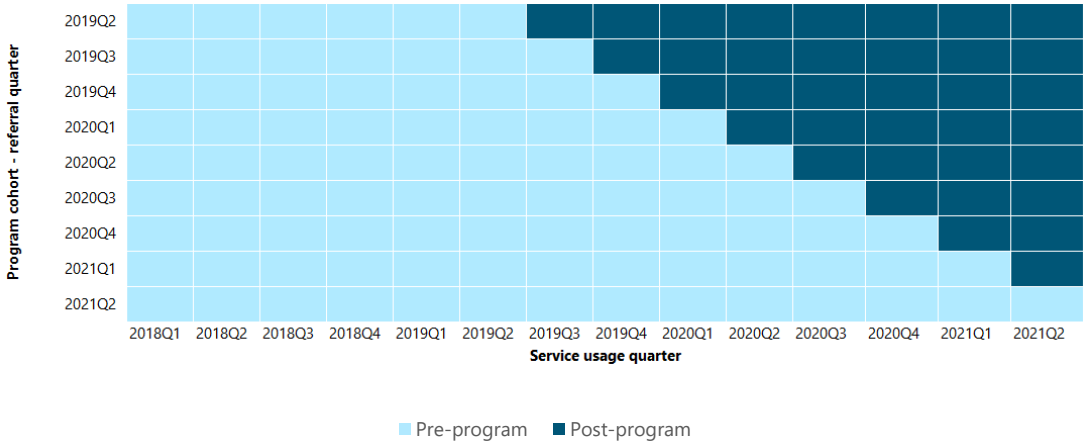
Parameter	Estimate	P-value
Intercept	-3.06	<0.01
Household income spline $0–250	0.41	0.05
Household income spline $250–300	6.38	<0.01
Household income spline $350–500	-5.90	<0.01
Household income spline $500–750	1.19	<0.01
Current risk of violence	-1.03	<0.01
Currently homeless	-0.27	<0.01
Age spline 16–18	0.50	<0.01
Age spline 18–25	-0.27	<0.01
Aboriginal	-0.26	<0.01
Current accommodation unsuitable	-0.82	<0.01
Social housing history	-1.02	<0.01
Have somewhere safe to stay	-0.59	<0.01
Disability	0.16	<0.01
Mid North Coast	0.47	<0.01
Hunter New England	0.50	<0.01
Central Coast	1.30	<0.01
Southern NSW	0.55	<0.01
Nepean Blue Mountains	0.25	0.09
Western NSW and Far West	-0.38	0.02
Sydney	0.44	<0.01
Murrumbidgee	0.26	0.07
South Western Sydney	0.61	<0.01
South Eastern Sydney	0.58	<0.01
Northern NSW	1.05	<0.01
Unknown district	-0.28	0.33

A3.2 OPPORTUNITY PATHWAYS

ANALYSIS DESIGN

Our primary approach is a stepped wedge regression model where we effectively compare outcomes of the same people before and after they commenced participating in Opportunity Pathways (see Figure A13). We consider this approach more appropriate than a comparison group, because there are likely to be systematic differences (that is, selection biases) between the participant and non-participant groups. For example, participants are likely to be 'ready to change'; also, there are differences between service providers that may affect participant outcomes (for example, some are also Jobactive providers, which make direct, internal referrals of jobseekers to Opportunity Pathways).

FIGURE A13. SCHEMATIC OF PRE- AND POST-PROGRAM STATUS FOR OPPORTUNITY PATHWAYS STEPPED WEDGE DATA REGRESSION MODEL DESIGN



Outcomes observed in the pre-program period forms the baseline and outcomes are measured against this baseline in the post-program period to determine the program effect. For pre-program service use, we have used 2018 Q1 as the cut-off across all participants; thus, the length of the pre- and post-program periods will vary depending on the participant's commencement date.

From an outcome testing perspective, we have up to eight quarters of post-program experience.

For each service usage category, we have fit a multivariate logistic regression with random effects, with the exception of income benefit payments where we have fit a multivariate linear regression with random effects. The input dataset is in the form of one row per person per quarter. A person will therefore appear in the dataset multiple times, sometimes pre-program and sometimes post-program. The random effect is for participants, thus recognising correlation across time.

The income support model structure is:

$$Y_{it} = \text{logit}^{-1}\left(P_{it}\delta + X_{i1}\beta_1 + \mathrm{X_{i2}}\beta_2 + S_{it,1}\gamma_1 + W_t\phi_1 + Z_i\right) + error$$

Notationally, the β are parameters attached to person-related fixed effects (X) that do not vary with time, γ relate to person-related fixed effects (S) that do vary in time, (δ) relates the effect of being in the project, and ϕ relates to time effects visible in the model. The variables here are:

Y_{it}	An indicator (1=yes, 0=no) whether a person $(\boldsymbol{i})$ received any income support payments in quarter $(\boldsymbol{t})$
logit^{-1}	The inverse logit function, which ensures the estimated quantity is a probability between zero and one
P_{it}	1 if a person (i) is in the post-program group in quarter (t)
X_{i1}	1 if person (i) is male, 0 otherwise
X_{i2}	1 if person (i) has ever received income support prior to t; 0 otherwise
$S_{it,1}$	1 if person (i) has received income support in the quarter prior to t; 0 otherwise
W_t	The time elapsed (in years) from 31 March 2018
Z_i	The random effect for person (i)

We note that this model structure:

- models the probability of not receiving benefit in each quarter. Any effect size needs to be totalled across several quarters
- includes the previous quarter income support receipt (term $S_{it,1}$). This means that the program parameter (δ) is the incremental program effect for both moving off the benefit, if the person was previously on it, and remaining off for those already not receiving the benefit. By design, this means that the program is expected to have a cumulative impact over successive quarters, which can be calculated.

For logistic regression, the program effect is expressed as the odds ratio. If p is the probability of being on the benefit without the program and q is the impact with the program, the odds ratio is $\frac{q}{1-q}/\frac{p}{1-p}$. This will have a different percentage point impact, depending on the starting probability (p). An odds ratio of one is no effect, and an odds ratio below one represents a decrease in the outcome rate.

We have applied outcome models to each of the linked outcomes. Generally, this is seeking to detect a measurable decrease in service use across the stepped wedge set-up.

DATA PROCESSING

In our analysis, we have controlled for the follow demographic characteristics:

- date of birth
- gender
- identifying as Aboriginal and/or Torres Strait Islander
- cultural and linguistic diversity (CALD).

These characteristics were sourced from the data listed below:

- social housing tenancy clients
- HR clients
- PRA clients
- AHAs
- community housing tenancy clients
- program data for each of the initiatives.

We have reported someone in the dataset to be Aboriginal or Torres Strait Islander if they identified as being so on at least one of the sources listed above. Given this evaluation is of a program based in NSW, we have used the term 'Aboriginal' only. It includes people who identify as Aboriginal and Torres Strait Islander, or as Torres Strait Islander. In addition, we have identified someone in the dataset as being from a CALD background if they have listed their main language as a language other than English and their country of birth as a country other than Australia.

OUTCOME MEASURE DEFINITIONS AND MODEL PARAMETERS

Table A6 describes the outcome measures for the Opportunity Pathways analysis.

TABLE A6. OUTCOMES MEASURES FOR OPPORTUNITY PATHWAYS

Outcome (in quarter)	Note
Income benefit receipt	Defined as being on one of the following benefits in the quarter: ABSTUDY AUSTUDY Carer Payment Disability Support Pension Farm Household Allowance JobSeeker Payment Newstart Allowance Parenting Payment Special Benefit Wife Pension Youth Allowance
Income benefit payments	Defined as payments received for any of the income benefits defined above in the quarter. Payments for CRA and COVID-19 Supplement have been excluded.
Enrolment in vocational education and apprenticeships and traineeships module	Enrolment in any module in the quarter
Ambulatory MH use	Use of any MH ambulatory service in the quarter
ED presentations	Any presentation to an ED in the quarter
Public hospital admissions	Any admission to a public hospital in the quarter

Outcome (in quarter)	Note
Court finalisation for a proven offence	Any court finalisation for a proven offence in the quarter
SHS presentations	Any presentation to a SHS in the quarter
Being in public or community housing	In either a public housing or community housing tenancy in the quarter

Tables A7 to A15 are parameter tables for the outcome measures.

TABLE A7. MODEL – INCOME BENEFIT RECEIPT

Parameter	Coefficient	P-value
Intercept	-2.67	<0.01
Opportunity Pathways treat = TRUE	-0.73	<0.01
Received income benefits in previous quarter = TRUE	3.92	<0.01
Time spline (2019 Q4 to 2020 Q2)	2.73	<0.01
Time spline (2020 Q2 to 2020 Q4)	-1.78	<0.01
Gender = "Male"	-0.25	<0.01
Ever received income benefits = TRUE	1.85	<0.01
Quarters since last income benefit receipt spline (1 to 8)	-0.11	<0.01

TABLE A8. MODEL – INCOME BENEFIT PAYMENTS

Parameter	Coefficient	P-value
Intercept	1517	<0.01
Opportunity Pathways treat = TRUE	-152	<0.01
Time spline (2019 Q4 to 2020 Q2)	1990	<0.01
Time spline (2020 Q2 to 2020 Q4)	-706	<0.01
Age spline (17 to 27)	206	<0.01
Gender = "Male"	-580	<0.01
Intercept	1517	<0.01

TABLE A9. MODEL – ENROLMENT IN NCVER MODULE

Parameter	Coefficient	P-value
Intercept	-1.83	<0.01
Opportunity Pathways treat = TRUE	0.09	0.06
Gender = "Male"	-0.39	<0.01
Age spline (18 to 21)	-0.18	<0.01
Quarters enrolled in NCVER module spline (1 to 3)	0.21	<0.01
Enrolled in NCVER module in previous quarter = TRUE	2.65	<0.01
Ever enrolled in NCVER module = TRUE	0.45	<0.01

TABLE A10. MODEL – AMBULATORY MH

Parameter	Coefficient	P-value
Intercept	-4.02	<0.01
Opportunity Pathways treat = TRUE	-0.12	0.09
Accessed MH ambulatory in previous quarter = TRUE	1.45	<0.01
Age spline (15 to 25)	-0.03	<0.01
CALD = TRUE	-0.20	0.08
Time spline (2020 Q4 to 2021 Q1)	-2.68	<0.01
Quarters accessing MH ambulatory spline (1 to 6)	0.40	<0.01
Quarters since last MH ambulatory access spline (1 to 8)	-0.22	<0.01
Ever accessed MH ambulatory = TRUE	2.62	<0.01

TABLE A11. MODEL – ED PRESENTATIONS

Parameter	Coefficient	P-value
Intercept	-3.35	<0.01
Opportunity Pathways treat = TRUE	-0.04	0.26
Quarters presenting to ED spline (1 to 6)	0.28	<0.01
Quarters since last presentation to ED spline (1 to 4)	-0.13	<0.01
Quarters since last presentation to ED spline (4 to 12)	-0.05	<0.01
Ever presented to ED = TRUE	2.19	<0.01
Age spline (15 to 35)	-0.01	<0.01
Aboriginal = TRUE	0.17	<0.01
CALD = TRUE	-0.41	<0.01
Time = 2020 Q2	-0.19	<0.01

TABLE A12. MODEL – HOSPITAL ADMISSIONS

Parameter	Coefficient	P-value
Intercept	-3.60	<0.01
Opportunity Pathways treat = TRUE	-0.12	0.07
CALD = TRUE	-0.21	0.02
Quarters with hospital admissions spline (0 to 4)	0.40	<0.01
Quarters since last hospital admission spline (1 to 8)	-0.09	<0.01
Ever admitted to hospital = TRUE	1.60	<0.01
Time = 2020 Q2	-0.24	<0.01
Time spline (2020 Q3 to 2021 Q2)	-0.42	<0.01

TABLE A13. MODEL – COURT FINALISATIONS

Parameter	Coefficient	P-value
Intercept	-4.88	<0.01
Opportunity Pathways treat = TRUE	-0.16	0.02
Gender = "Male"	0.73	<0.01
Ever had court finalisation = TRUE	2.59	<0.01
Age spline (55 to 70)	-0.08	<0.01
Quarters since last court finalisation spline (1 to 12)	-0.09	<0.01
Quarters with court finalisation spline (1 to 4)	0.25	<0.01

TABLE A14. MODEL – SHS PRESENTATIONS

Parameter	Coefficient	P-value
Intercept	-2.42	<0.01
Opportunity Pathways treat = TRUE	-0.40	<0.01
Gender = "Male"	-0.22	<0.01
Aboriginal = TRUE	0.18	<0.01
CALD = TRUE	-0.42	<0.01
Age spline (18 to 30)	-0.06	<0.01
Time from referral spline (-4 to 0)	0.55	<0.01

TABLE A15. MODEL – SOCIAL HOUSING AND COMMUNITY HOUSING TENANCY

Parameter	Coefficient	P-value
Intercept	-4.18	<0.01
Opportunity Pathways treat = TRUE	0.29	0.28
Time from referral spline (-4 to 0)	0.32	<0.01
Time from referral spline (0 to 2)	-0.72	<0.01
Quarters in social/ community housing spline (1 to 4)	0.30	<0.01
In social/ community housing in previous quarter = TRUE	6.37	<0.01
Ever in social/ community housing tenancy = TRUE	0.77	<0.01

A3.3 YOUTH DEVELOPMENT SCHOLARSHIPS

The basis of the quantitative analyses is comparing the outcomes between the recipient and comparison groups. Specifically, we define the groups as follows.

1. recipient group: those who successfully received a scholarship.
2. comparison group: those who applied for and were eligible for a scholarship but were not successful.

The allocation of scholarships is based on selection score.

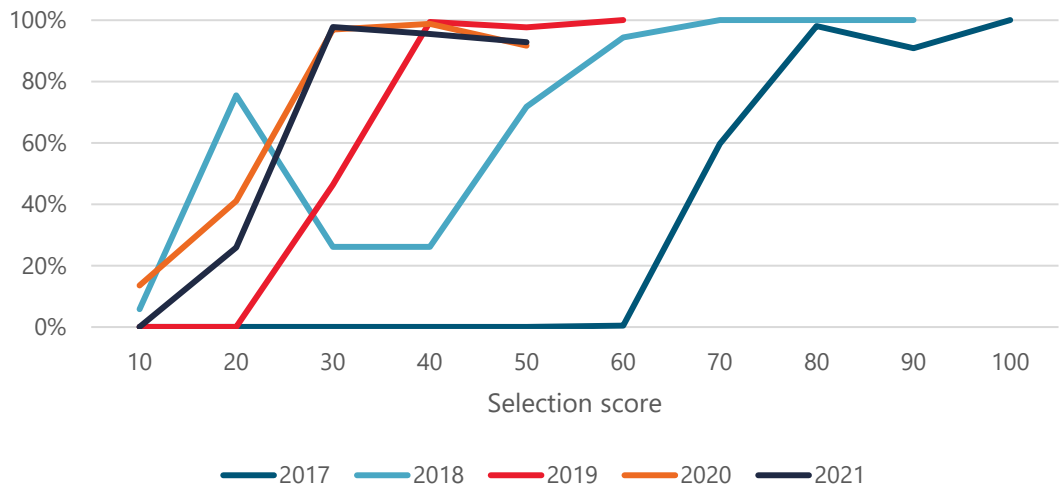
SELECTION SCORE

After being assessed against the eligibility criteria, new applicants are scored according to the selection criteria. The score will determine the ranking of the applications and whether they will be shortlisted for approval. The selection criteria are designed to select and give priority to students who have a clear desire to finish high school and are facing disadvantage. Discussions with the program area identified that:

1. in 2018, a ratio allocation of scholarships was used across the districts. This meant that even low scoring applications could be selected in order for a district to meet allocation numbers
2. from 2019 onwards, a centralised scoring system was introduced, where scholarships were awarded based on merit and ranking across all of NSW
3. additional cohorts were added to the assessment process in the 2020 program to align with DCJ's new strategic priorities. In addition, the quality of personal statements in 2020 were not as high; therefore, the applications did not receive scores as high as those in previous years.

This means that selection scores are likely not comparable across different years. Applicants in different years are likely to be treated differently in terms of equity, even if they have the same assessment score. Figure A14 shows the proportion of applicants receiving scholarships by selection score bands; each line represents applicants from different years.

FIGURE A14. PROPORTION OF APPLICANTS RECEIVING SCHOLARSHIP BY YEAR OF APPLICATION



We observe that:

1. there is no clear cut-off score for 2018 applicants, and this reflects the ratio allocation approach that was taken for the districts in these years. We note that the large percentage of applicants who received the scholarship with a score in the 30–40 band are driven by a single district. This mixing of recipient rates actually improves our ability to model how scholarships affect outcomes because we have applicants in the recipient and comparison group with similar scores
2. the cut-off score is clearer for the remaining years. It appears to be around 70 for the 2017 applicants, 30 for the 2019 applicants, 20 for the 2020 applicants and 30 for the 2021 applicants.

ANALYSIS

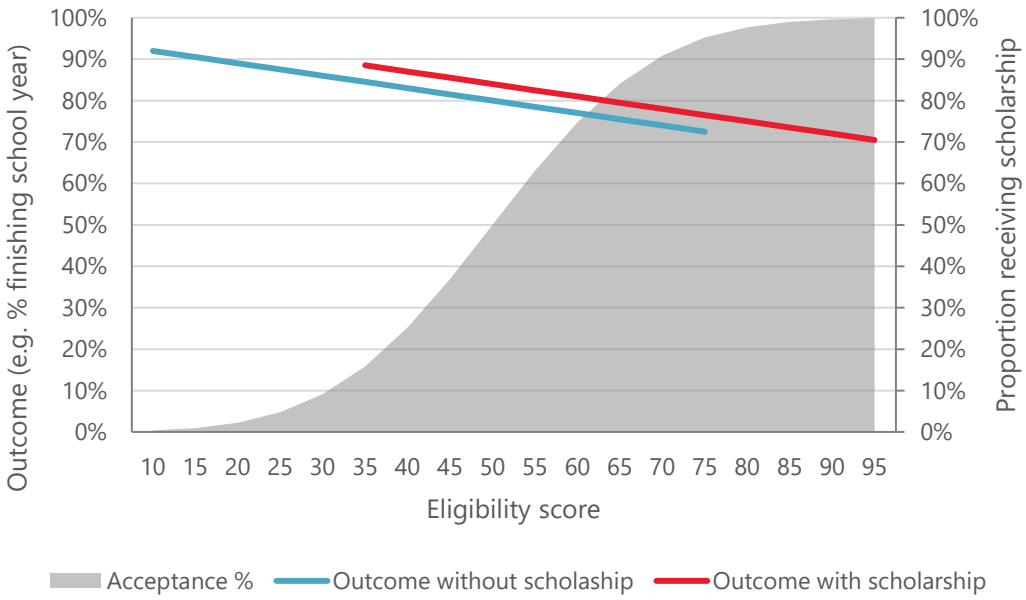
Our primary analytical approach is a regression model, which accounts for scholarship recipients' increased disadvantage by including 'scholarship receipt' as a variable in the model. This bears some resemblance to a fuzzy regression discontinuity design, where we would expect to see worse outcomes as the assessed score increases, but with the potential to measure an improvement.

This idea is illustrated in Figure A15. In this illustration, the Scholarships program is increasing the proportion of participants completing the school year from the expected level (blue line) to a higher level (red line). We note that other control variables will generally be added to the model too.

A regression discontinuity design would typically only use observations surrounding a clear score threshold above which scholarships are awarded. We have used all observations but included the score as a covariate. The lack of clear score threshold for awarding a scholarship (observed in Figure A14) and differences between the years means that there are people

both with and without scholarships across the full range of scores. This means we can use all observations in a regression model to estimate the effect of the scholarships program.

FIGURE A15. IDEALISED REPRESENTATION OF OUTCOME TESTING FOR THE SCHOLARSHIPS PROGRAM



From an outcome testing perspective, we have modelled outcomes for the FY 2016–17, FY 2017–18, FY 2018/19 and FY 2019–20 applicants. Most of the outcome data is available to 30 June 2021, so this ensures we can look at outcomes in the year following receipt of the scholarship.

For each service usage outcome, we have fit a multivariate logistic regression based on an indicator of recipient, selection score and other control variables, including:

- age
- gender
- Indigenous status
- CALD
- housing type at application
- school year
- district
- historical service usage.

The school completion model structure is:

$$Y_i = \text{logit}^{-1}(\beta_0 + \delta \text{D}_\text{i} + \gamma S_i + \beta_1 C_{i1} + \beta_2 C_{i2} + \beta_3 C_{i3} + \beta_4 C_{i4}) + error$$

The variables here are:

Y_i	An indicator (1=yes, 0=no) of whether a person (i), attained the HSC (model restricted to those in Year 12)
logit^{-1}	The inverse logit function, which ensures the estimated quantity is a probability between zero and one
D_i	1 if a person (i) is in the recipient group; that is, received a scholarship
S_i	The panel selection score for person (i) (2019 values, cupped at 20, capped at 50)
C_{i1}	Characteristic c1 – indicator for whether person (i) identifies as Aboriginal
C_{i2}	Characteristic c2 – indicator for whether person (i) identifies as CALD
C_{i3}	Characteristic c3 – indicator for whether person (i) resides in a Greater Sydney district
C_{i4}	Characteristic c4 – interaction between CALD indicator and Greater Sydney indicator
δ	The estimated effect of the Scholarships program on a person completing the school year

Exact parameterisations of models vary depending on variable significance.

A3.4 FACTOR ANALYSIS

SATISFACTION WITH OPPORTUNITY PATHWAYS (PROGRAM DATA)

Analysis of the program data shows that:

- Most (94%) of Opportunity Pathways participants would recommend the program to someone else in a similar situation.
- Satisfaction was high across all types of employment.
- The sample is likely to be biased (surveys were returned by only about 10% of participants with intake assessments).

Factor analysis shows there are three factors driving participant satisfaction with Opportunity Pathways.

- Receiving enough support, having a voice in that support, and setting personal goals (31% of variation).
- Being linked to a service that helped them get a job (25% of variation).
- Receiving useful training (20% of variation).

Regression analysis shows that overall satisfaction was most strongly related to receiving 'enough support' (this was four times as important as the next most important variable, 'voice in support'). However, the low coverage of program data creates issues for outcomes data analysis. In particular:

- the final program dataset includes 2,970 self-assessments, however most (75%, 2277) are intake assessments.
- almost all (96%) of satisfaction surveys are missing a statistical linkage key, preventing further analysis in the linked dataset.

The following tables provide technical data from the Principal Components analysis using Varimax rotation that was applied to the survey data collected from Opportunity Pathways.

The first table shows the three factors that were extracted based on Eigenvalue over 1.0. This shows that three factors account for 77% of the variance across all respondents' (a total of 372 people) answers to the 12 components of satisfaction items. These factors are described using the names that were applied based on the data in Table A16.

0 shows survey items and their loadings on each factor. The items with the highest loadings, positive or negative, are used to define the factor.

TABLE A16. THREE FACTORS EXTRACTED BASED ON EIGENVALUE OVER 1.0

Factor	Initial Eigenvalues			Rotation sums of squared loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1. Receiving enough support, having a voice in that support, and setting personal goals	6.398	53.317	53.317	3.731	31.095	31.095
2. Being linked to a service that helped them get a job	1.723	14.358	67.675	3.059	25.489	56.584
3. Receiving useful training	1.106	9.220	76.895	2.437	20.312	76.895

TABLE A17. SURVEY ITEMS AND THEIR LOADINGS ON EACH FACTOR

	Component		
	1. Receiving enough support, having a voice in that support, and setting personal goals	2. Being linked to a service that helped them get a job	3 Receiving useful training
I had a say in what I do to help me get a job	.870	.061	.216
My goals reflect what I would like to achieve	.773	.115	.308
My case plan will get me where I want to be	.654	.308	.250
I feel I can achieve my case plan goals	.594	.418	.307
I have been linked to other services that will help me reach my case plan goals	.615	.477	-.078
The services I was linked to helped me look for a job	.287	.886	.027
The training I go to is what I want to learn	.447	.056	.816
The training I go to will help me get a job	.426	.196	.801
My caseworker gives me enough support	.841	.135	.257
My caseworker has helped me to get a job	.101	.704	.568
The services I was linked to helped me get a job	.185	.884	.174
My caseworker has helped me keep my job	.065	.650	.637

Table A18 shows the results of using the factors as independent variables in a regression where the dependent variable was whether the person would recommend Opportunity Pathways. The model accounts for 66% of all variation recommendation and all three factors were significant predictors. This shows a standardised beta for the first factor (standardised beta .761). 'Receiving enough support, having a voice in that support, and setting personal goals' is three to four times as large as the other two factors (.167, .244).

TABLE A18. FACTORS AS INDEPENDENT VARIABLES WHERE DEPENDENT VARIABLE WAS WHETHER THE PERSON WOULD RECOMMEND OPPORTUNITY PATHWAYS

Model		Unstandardised coefficients		Standardized coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.908	.021		182.578	.000
	1. Receiving enough support, having a voice in that support, and setting personal goals	.328	.021	.761	15.306	.000
	2. Being linked to a service that helped them get a job	.072	.021	.167	3.354	.001
	3. Receiving useful training	.105	.021	.244	4.905	.000

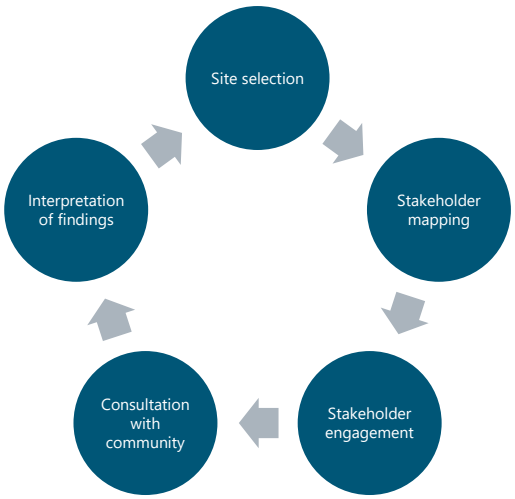
APPENDIX 4 QUALITATIVE METHODS

A4.1 ABORIGINAL COMMUNITY CONSULTATION

The issues Aboriginal people and communities face when accessing homelessness and housing products, services and supports are well documented. Our methods included a deep dive into how Aboriginal people, organisations and communities experience the Service Improvement Initiatives (SIIs), seeking to identify any unmet needs.

We worked with our Aboriginal Reference Group to design and implement the consultation with Aboriginal people, organisations and communities in five sites (Dubbo, Campbelltown, Kempsey, Bateman's Bay and Redfern) (see Figure A16).

FIGURE A16. HOW OUR ABORIGINAL REFERENCE GROUP STRENGTHENED THE EVALUATION



Site selection. We worked in collaboration with our Aboriginal Reference Group to choose the five sites. To ensure we heard a range of issues and perspectives, we developed inclusion criteria to guide our selection. These were: the size of the Aboriginal population in the community; the location (urban or regional); community issues; and the presence and absence of the SIIs.

We are aware of the consultation fatigue many Aboriginal people, organisations and communities experience, and the final layer of our decision-making was to consider the extent of recent consultation in the housing and homelessness sector in these locations.

Stakeholder mapping. Our next step was to map potential key stakeholders in each of the five locations. We worked with our Aboriginal Reference Group to identify Aboriginal individuals and organisations in each location, whose core business included responding to Aboriginal people's housing needs. Other individuals and organisations were identified using Google searches. We nominated which of the five SIIs each potential stakeholder might be aware of. Working with the Aboriginal Reference Group, we created a shortlist of individuals and organisations with the greatest likely awareness of the SIIs. We created separate lists for Department of Communities and Justice (DCJ) stakeholders and broader community stakeholders.

Stakeholder engagement. We made initial contact with stakeholders by telephone and email, where relevant asking for the stakeholder's suggestions on other people or organisations to include in the consultation. We developed culturally appropriate

promotional flyers and information sheets, which we distributed to interested stakeholders. A key determinant of our success was the deep connections our Aboriginal Associates and Aboriginal Reference Group members have across the housing and homelessness sector.

Consultation. In each location, we held separate focus groups for Aboriginal DCJ staff and community organisations. Some of our Aboriginal Reference Group members participated in these consultations. Where relevant, we met separately with some of the stakeholders including Elders. Unless asked not to, we audio recorded the focus groups and prepared comprehensive notes for the focus group. These were developed into an overall summary of issues for each of the five sites. We sent participants the summary of issues and the specific notes, asking for their correction or endorsement of these as accurate.

In total, we spoke with 76 Aboriginal people, including representatives of community groups, peak bodies and DCJ staff (see Table A19).

TABLE A19. ABORIGINAL STAKEHOLDER INTERVIEWS CONDUCTED

Location	Number of participants
Dubbo	17 people (13 community stakeholders, 4 DCJ staff)
Redfern	15 people (11 community stakeholders, incl. Koori Interagency), 4 DCJ staff)
Campbelltown	11 people (8 community stakeholders, 3 DCJ staff)
Bateman's Bay	9 people (6 community stakeholders, 3 DCJ staff)
Kempsey	20 people (20 community stakeholders, 1 DCJ staff)
Statewide	NSW Aboriginal Land Council (4 people)

Interpretation of findings. We presented our emerging findings to the Aboriginal Reference Group in several stages. First, we summarised the issues for the five locations emerging from the consultation. Next, we presented the emerging outcomes data and worked with the Aboriginal Reference Group to interpret these findings in view of the qualitative data. Our final step was to draw on all data sources to make recommendations for the DCJ in interim reports for individual initiatives, and as a standalone report, as well as in this report.

A4.2 KEY STAKEHOLDER INTERVIEWS

The purpose of our qualitative data collection and analysis was to understand issues for implementation and develop hypotheses about what mechanisms lead to outcomes for people and communities who participate in the SIIs. We collected qualitative data from staff and stakeholders at three time points. Each consultation had a slightly different focus.

- **Baseline (October 2019).** Telephone interviews with DCJ staff and stakeholders involved in Rent Choice (9 people), Opportunity Pathways (4 people), Youth Development Scholarships (5 people) and Place Plans (4 people) across relevant districts, with a focus on understanding program implementation. Interview guides focused on topics of reach, effectiveness, adoption, implementation and maintenance.
- **Interim (October 2020).** Telephone interviews and focus groups with DCJ staff and stakeholders for Rent Choice (11 people), Opportunity Pathways (7 people) and Youth Development Scholarships (9 people) across relevant districts, with a focus on understanding contemporary policy direction and program delivery, particularly with respect to COVID-19. In December 2020, our partners at Social Ventures Australia completed interviews for the Early Childhood Education Services program in Moree and Mt Druitt. This included interviews with families (8 people in 4 locations); interviews with partners and staff (9 people: 4 interviews in Mt Druitt, 5 interviews in Moree), and interviews with DCJ Commissioning and Planning and Policy staff (4 people).
- **Final (May 2022).** Briefing workshops with Evaluation Management Team members and DCJ program owners (Housing and Homelessness Strategy, Policy and Commissioning (Private Market Assistance)) to discuss the contemporary strategic environment for the remaining SIIs (Rent Choice, Opportunity Pathways and Youth Development Scholarships).

Interview and focus group data were analysed thematically, looking at similarities and differences. We developed a coding framework based on initial emerging themes and key evaluation questions. Once all key data were coded, we described the key themes, then looked at how these themes compared across contexts, and considered how interests and perspectives differ and why. We also looked at how the themes were inter-related.

A4.3 LONGITUDINAL CLIENT CASE STUDIES

The purpose of the client case studies was to distil the experience of a sample of people who participated in Opportunity Pathways and/or received Rent Choice. The objective was to chart their experience over time to allow for an analysis of the causal impact of the initiatives.

The case studies were being done longitudinally, meaning individuals were invited to participate in interviews about their life and housing situation every six months over a two-year period (five interviews in total). The data captured allowed for qualitative analysis of the causal mechanisms within the program and the extent to which they are effective for people in different contexts and circumstances.

PARTICIPANT SELECTION

Sampling strategy

Potential participants were randomly selected by ARTD, within a sampling frame (see Table A20) based on analysis of Application for Housing Assistance (AHA) data from the past 12 months. We sought to include study participants who were accessing the following programs:

- Rent Choice Youth
- Rent Choice Start Safely
- Rent Choice Assist
- Opportunity Pathways.

We developed a sampling framework to ensure potential participants included a mix of genders, ages, cultural backgrounds, locations and SIIs – see Table A20. DCJ was responsible for extracting a list of potential participants (40 people). The pool of potential participants was intentionally larger than the desired sample size to account for an anticipated 50% refusal/ non response rate.

TABLE A20. SAMPLING FRAMEWORK FOR LONGITUDINAL CLIENT CASE STUDIES

	Location	Person demographics	Most recent housing services
01	Surry Hills/ Redfern	Female 30–49, Aboriginal	Rent Choice Start Safely
02	Surry Hills/ Redfern	Female 16–29, Aboriginal	Rent Choice Start Safely
03	Inner City and Eastern Suburbs	Female 16–25	Rent Choice Youth and Opportunity Pathways
04	Inner City and Eastern Suburbs	Male 16–25	Rent Choice Youth and Opportunity Pathways
05	Parramatta	Female 16–25	Rent Choice Youth
06	Parramatta	Male 16–25	Rent Choice Youth
07	Surry Hills/ Redfern	Female 16–25	Opportunity Pathways
08	Surry Hills/ Redfern	Male 30–49	Opportunity Pathways
09	Liverpool	Female 16–25	Rent Choice Youth and Opportunity Pathways
10	Liverpool	Male 16–25	Rent Choice Youth and Opportunity Pathways
11	Campbelltown	Female 30–49	Rent Choice Assist

	Location	Person demographics	Most recent housing services
12	Campbelltown	Male 30–49	Rent Choice Assist
13	Liverpool	Female 30–49, Aboriginal	Opportunity Pathways
14	Liverpool	Male 30–49, Aboriginal	Opportunity Pathways
15	Lismore	Female 16–25, Aboriginal	Rent Choice Youth
16	Lismore	Male 16–25, Aboriginal	Rent Choice Youth
17	Lismore	Female 16–29	Opportunity Pathways and Rent Choice
18	Lismore	Male 16–29	Opportunity Pathways and Rent Choice
19	Lismore	Female 30–49	Opportunity Pathways
20	Lismore	Male 30–49	Opportunity Pathways

The actual sample (Table A21) had a slightly higher proportion of females than the sampling framework.

TABLE A21. LONGITUDINAL CLIENT CASE STUDIES – ACTUAL SAMPLE CHARACTERISTICS

	Location	Person demographics	Most recent housing services
01	Lismore	Female 38	Rent Choice Start Safely
02	Lismore	Female 22, Aboriginal	Rent Choice Youth and Opportunity Pathways
03	Lismore	Female 19–21	Rent Choice Youth and Opportunity Pathways
04	Lismore	Female 60–64	Opportunity Pathways
05	Lismore	Female 28	Rent Choice Start Safely
06	Dubbo	Female 23	Rent Choice Start Safely
07	Liverpool	Female 23	Rent Choice Youth
08	Campbelltown	Male 20	Opportunity Pathways
09	Campbelltown	Female 38	Rent Choice Start Safely
10	Campbelltown	Female 37	Rent Choice Start Safely and Opportunity Pathways

	Location	Person demographics	Most recent housing services
11	Coffs Harbour	Female 27, Aboriginal	Rent Choice Start Safely and Opportunity Pathways
12	Coffs Harbour	Male 24, Aboriginal	Rent Choice Youth
13	Campbelltown	Male 21	Rent Choice Youth and Opportunity Pathways
14	Hornsby	Female 40	Rent Choice Start Safely
15	Liverpool	Female 22	Rent Choice Youth and Opportunity Pathways
16	Liverpool	Female 37	Rent Choice Start Safely & Opportunity Pathways
17	Hornsby	Female 43	Rent Choice Start Safely
18	Liverpool	Female 19, Aboriginal	Rent Choice Youth
19	Port Macquarie	Female 20, Aboriginal	Rent Choice Youth and Opportunity Pathways

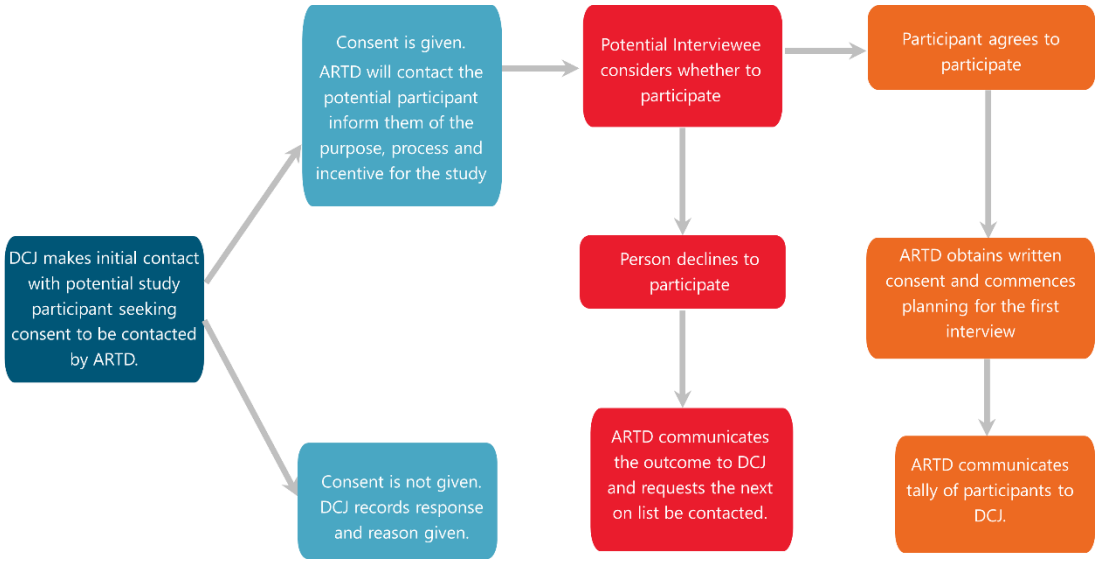
RECRUITMENT AND CONSENT PROCESSES

DCJ Central Office was responsible for inviting selected people to participate in the research. This ensured that the ARTD research team did not hold any private or confidential information about the selected participants until they had given their informed consent to be contacted. It also ensured that the person's DCJ caseworker (if relevant) was not aware that this person had agreed to participate in a case study to manage the risk of unintended positive or negative consequences stemming from a decision to participate in the study.

DCJ made contact using the clients' preferred contact mode (telephone, email or SMS). We developed the invitation for these three modes of contact. Where it was appropriate to do so, the DCJ staff member was responsible for recording participants' reasons for choosing not to participate (unwilling/ unable/ other). There were no systematic differences between people who did and did not participate.

This initial contact sought consent from clients to being contacted by ARTD. ARTD then contacted the potential participant and provided them with further information relating to the study, explaining what would be required of them and the incentive payments available. ARTD did not obtain consent at this point; rather, potential participants were given time to consider the request before deciding whether to participate. A second contact was made to ascertain consent and, where agreed to, written consent was obtained. 0 illustrates this recruitment process.

FIGURE A17. OVERVIEW OF THE LONGITUDINAL CLIENT CASE STUDY RECRUITMENT PROCESS



The DCJ staff member contacted potential participants by moving down the list until the requisite number of participants had been obtained. ARTD communicated regularly with DCJ staff about participant numbers.

At every research time point, ARTD contacted people who previously participated. We expected that not all case studies would be maintained for the duration of the research, given the dynamic nature of the participants' housing and personal circumstances. However, we were lucky to be able to complete 19 of the 20 planned case studies.

INFORMED CONSENT

We developed a simple, plain English Participant Information and Consent Form that explained the project, how we would use the information participants provided, that participation was voluntary and that choosing to participate or not participate would have no bearing on the service they receive from their case manager.

MINIMISING BIAS

To minimise the risk of a participant's service provision being affected by their being involved in our study, their local housing client managers were not notified that their client was participating in the evaluation. This was an important step to minimise the risk of observation bias (for people who choose to participate) and the risk of altered service quality (for people who choose not to participate).

REIMBURSEMENTS

In recognition of participants' time and willingness to share their experiences, ARTD offered participants a Woolworths Essentials Card or Coles Gift Card to the value of $100 for each interview they participated in (these gift cards are not redeemable for alcohol or tobacco products). This meant that a participant who was interviewed five times received $500

worth of gift cards over the two-year period. The value of the gift card per interview is higher than ARTD usually offers study participants; however, as this is a longitudinal study, the level of incentive was raised in order to improve the chances of study participants completing all five interviews, and in recognition of their commitment to a longer-term project.

INTERVIEW SCHEDULE AND CONTENT

The first interview was designed to build rapport and develop the participant's understanding of the research. It was also an opportunity for the participant to give a broad overview of their life story.

The second, third and fourth interviews took place approximately six months apart. At the first, third and fifth interview, the Personal Wellbeing Index (PWI) survey was administered. The PWI was included in the case studies as this standardised tool is already in use by DCJ and provides data that is comparable with an existing dataset. The administration of the PWI at 12-month intervals also provided a quantitative measure for change over time, to complement the qualitative data collected.

In the final interview, study participants were asked to identify a service provider whom they trust and were happy for us to interview. This service provider could be their DCJ caseworker or an employee of another service provider with whom they worked closely. The purpose of the stakeholder interview is to better understand why certain forms of assistance were offered to the participant or not, and to identify any systemic or individual constraints experienced in service provision to the study participant as their client.

RECORDING AND DATA ANALYSIS

With the study participants' permission, the interviews were audio recorded using a digital recorder for the purpose of transcription, to ensure the research accurately reflects the interviewees' comments and for analysis. Participants' names were changed when the recording was transcribed to ensure anonymity. If participants did not consent to recording, written notes were taken instead.

The qualitative data from the interviews were analysed against a coding framework. We used an emergent (grounded theory) methodology, informed by an Indigenous centred approach. This approach allows meaning to develop through interaction. It has been used successfully in research with Aboriginal and Torres Strait Islander people in Queensland.[2] We developed a coding framework based on initial emerging themes and key evaluation questions. Once all key data were coded, we described the key themes, then looked at how these themes compared across contexts, and considered how interests and perspectives differ and why. We also looked at how the themes were inter-related. In this way, we were able to use qualitative data to look at what works, for whom, in what circumstances and why.

[2] Hoerara, R. (2013). 'Opening up: A grounded theory on how urban Indigenous men of Australia respond to cardiovascular disease', Master of Public Health thesis, Massey University, Wellington, New Zealand, https://mro.massey.ac.nz/bitstream/handle/10179/5662/02_whole.pdf?sequence=2&isAllowed=y.

We asked participants if they wished to review any case stories that were prepared for inclusion in reports to check their accuracy and so they could request changes if required. Case stories use pseudonyms and are de-identified as far as possible whilst retaining any important contextual information.

A4.4 QUALITATIVE COMPARATIVE ANALYSIS

Qualitative Comparative Analysis (QCA) seeks to bridge the gap between qualitative (case oriented) and quantitative (variable oriented) research by analysing causal patterns using a small to medium number of cases. In this evaluation, 'cases' are the housing-related life journeys of our 19 case study participants that include their participation (or not) in Rent Choice and Opportunity Pathways.

Rather than assuming that a program or single factor causes an outcome, QCA views causality as complex and time sensitive. It assumes that outcomes derive from a combination of factors and focuses on finding necessary and sufficient conditions for one or more outcomes of interest – in short, it aims to find causal 'recipes for success'. In this evaluation, one of these conditions is program participation.[3] The method retains the depth of case-oriented methods but goes beyond traditional case studies to systematically compare information across cases. Table A22 defines key QCA-related terms.

TABLE A22. QCA TERMS AND DEFINITIONS

Term	Definition
Calibration	A number that is assigned to a condition to represent a case's degree of membership in that condition.
Calibration structure	A framework devised by researchers that breaks each condition down into tangible measures and breaks each measure down into fuzzy set values. Clear definitions are created for each fuzzy set value.
Case	A unit under study, in this case a person's life over two years.
Condition	A factor or variable that is associated with an outcome of interest.
Consistency	A measure of the degree to which cases that follow the same pathway also share the same outcome.
Coverage	A measure of the frequency with which a given pathway leads to an outcome.
Crisp set	A type of QCA in which conditions are either 'present' or 'not present' for each case; conditions are coded as 1 or 0, respectively, for each case.
Fuzzy set	A type of QCA in which cases are assigned a value between 0 and 1, based on their degree of membership in the condition. Cases with membership over .5 are considered to be more in than out of a condition, and cases with membership below .5 are considered to be more out than in.

[3] We did not include case studies of people randomly selected who did not receive Opportunity Pathways or Rent Choice. This is a limitation of the study in terms of inferring the causal effects of the program, but as described in earlier paragraphs, this was more a concern for the quantitative study. Further, our case study sample was not large enough to support this. Instead, we were able to look at patterns within the sample of participants and for those who did and did not achieve housing stability or housing independence.

Term	Definition
Necessity	A condition is necessary if the condition is present every time the outcome is present.
Outcome	The result of one or more conditions.
Solution pathway	A combination of two or more conditions that is associated with an outcome.
Sufficiency	A condition (or combination of conditions) is considered sufficient if the outcome is present each time the condition (or combination of conditions) is present.

Before outlining the QCA process, we want to present some limitations of the study.

Non-application of clinical scales. Some caution is required in interpreting the conditions we identified in step 1 below. While they were based on expert judgement, they did not involve the application of clinical scales. The identification of conditions of 'trauma' and 'current safety' in particular cannot be considered to have the same reliability as those derived from using clinical scales or validated tools.[4]

Potential lack of nuance. QCA is based on Boolean logic, or the reduction of all variables to 0 or 1, or a decimal in between, then testing if there are consistent patterns associated with outcomes. It requires that the natural variation within each condition be reduced to a presence or absence of the condition (crisp set) or some degree of presence or absence (fuzzy set). As described below, we combined these approaches as some variables lent themselves to simple presence or absence (such as access to a car), while others were much harder to turn into binary variables (such as the quality of case management support). It should be noted however that ultimately, in the causal configuration, calculations are reduced to binary variables (the fuzzy coding of degrees of presence or absence is limited to interpretation of findings). This limits the ability of QCA to detect the causal power of a condition when it may be more nuanced than simple presence or absence.

To counter this limitation, we designed the QCA and the coding of variables to ensure maximum variability in the sample (see Table A25).

QCA PROCESS

There are three main variants of QCA: crisp set, multivalue and fuzzy-set. For this evaluation, we applied a combination of crisp set (csQCA) and fuzzy-set (fsQCA)[5] using the following six steps.

Step 1: Selection of conditions and outcomes. We commenced the short listing of conditions to include in the QCA based on interviews with staff members about what works

[4] Crucial to the success of these case studies was the engagement with the 19 randomly selected participants involved and the exceptionally experienced interviewers who conducted the case study interviews over two years. The relationships that were developed during these interviews allowed for a large amount of background information to surface.

[5] Adoption, one of the two outcomes considered in the QCA, was calibrated used a fuzzy scale. In addition, we conducted robustness tests by calibrating data for both csQCA and fsQCA and examining necessary and sufficient conditions using both variants. These analyses produced similar results.

for whom. We also used theory developed through thematic analysis as more and more information was obtained over the lifespan of the case studies about participants' backgrounds and participation in Rent Choice and Opportunity Pathways. We also included some basic demographic conditions. The theoretically important conditions that were found to be present in each case study were the result of the coding by the expert interviewers. This involved consultation and discussion between the interviewers.

This step was performed in two rounds. Round one identified the theoretically important variables outlined in Table A23. The codes here were applied to each case; for example, each case was recoded as a number between 1 and 6 for 'Case management support journey'. In later steps these will be reduced to zeros and ones.

TABLE A23. ROUND ONE VARIABLES

Case management support journey	Housing journey	Social support	Employment/ Education journey
1 – No quality case management	1 – Multiple different social housing rentals	1 – No friends or family who offer social and practical support	1 – Consistently unemployed and no study
2 – Positive experience with one case worker for a limited period	2 – Consistently in same social housing rental	2 – One or two friends or family members who offer social/ practical support	2 – Very brief periods of employment or study less than 13 weeks each time
3 – Consistent and continuous positive experience with one caseworker	3 – Multiple different private rental–	3 – Network of friends and family who offer social and practical support	3 – Some employment or study periods longer than 13 weeks
4 – Periods of positive case management with multiple different caseworkers	4 – Consistently in same private rental		4 – Employment/ education participation increasing over the research period
5 – Consistent positive experience with more than one caseworker	5 – Periods of homelessness (primary)	–	
6 – Positive experience with more than one highly proactive caseworker in different agencies who were linked	6 – Periods of homelessness (secondary)		–
	7 – Periods of homelessness (tertiary)		

Due to the lack of clear patterns, we re-convened the analysis, and established an additional set of conditions that had emerged as potentially causally important in the later stages of the case studies – see Table A24.

TABLE A24. ROUND TWO VARIABLES

Familiarity with social housing	Experience of trauma	Family background	Current safety[6]	Access to own car
1 – New to the system	1 – None	1 – Functional family background[7]	1 – No current threats	1 – Yes
2 – Some previous contact with the system	2 – None revealed but suspected	2 – Dysfunctional family background[8]	2 – Current threats	2 – Variable
3 – Contact with the system from childhood	3 – Trauma identified			3 – No

At this stage the variables had not yet been coded as 'present' or 'absent' – that is, as one or zero. This occurred in the next step.

Step 2: Calibration of data. In this step, the data on each variable are transformed into scores between zero and one for the outcomes and conditions based on the totality of evidence for each of case across the 19-month study period. In some cases, such as with the 'current safety' condition, data were calibrated as at the last interview. Depending on whether the conditions are binary or fuzzy or the outcomes are multivalue (that is, defined by more than one condition) scores are assigned, where 1=present and 0=absent. In the case of fuzzy conditions, there may be scores in between that denote 'more in than out' – that is, 0.67; in the middle – 0.5; and 'more out than in' – 0.33. For the purposes of calculation of necessary and sufficient conditions, greater than or equal to 0.5 is considered present and less than 0.5 is absent.

[6] The interviewer determined whether threats to the person's safety were present or absent.
[7] Living in a house where some or all aspects of their family are positively functioning; that is, there is closeness of relationships; age appropriate rules and consistency of parenting; family cohesion and quality time spent fostering skills/ interests; access to physical health services, products and activities; positive relationships between family members and they are able to get along; social connectivity outside the house. Australian Institute of Health and Welfare. (2022). Australia's Children, https://www.aihw.gov.au/reports/children-youth/australias-children/contents/social-support/families.
[8] Families that are unable to provide a safe and supportive environment, and where there is a lack of some or most of the dimensions.

TABLE A25. QCA CONDITIONS ANALYSED ACROSS TWO ROUNDS

Condition	Definition	Round(s)
Product	0=Rent Choice only, 1=Opportunity Pathways and Rent Choice	1 and 2
Aged over 25 years	0=25 and under, 1=Over 25	1 and 2
Female	0=Male, 1=Female	1 and 2
Inner regional	0=City, 1=Inner regional	1 and 2
Aboriginality	0=Not Aboriginal, 1=Aboriginal	1 and 2
Children in the home	0=No children in the home, 0.5=One or more child aged 9–18 in the home, 1=One or more child aged under 8 in the home	1 and 2
Social support	0=No social support, 0.5=One or two friends, 1=Network of support	1
Case management consistency	0=No consistent case management, 0.33=Some positive case management, 0.67=Periods of multiple positive case management, 1=Consistent case management	1
Employment or education	0=No sustained employment or education, 1=Employment/ education participation increasing over the research period	1
History of family dysfunction	0=Functional family background, 1=Dysfunctional family background	2
Current threat	0=No current threats, 1=Current threats	2
Access to vehicle	0=No access to a vehicle, 0.5=Variable access to a vehicle, 1=Access to a vehicle	2
Social housing background	0=No social housing background, 0.5=Some previous contact, 1=Contact with social housing as a child	2
Trauma	0=None revealed, 0.85=None revealed but suspected, 1=Trauma revealed	2
Outcome: Housing stability[9]	*0=Stable, 1=Not stable*	1 and 2
Outcome: Housing NSW subsidy [10]	*0=No public or private rental subsidy, 1=Public or private rental subsidy*	1 and 2

[9] A person's housing was defined as 'stable' if they were consistently in the same social housing tenancy or private rental tenancy over the 19-month study period.

[10] This was defined by whether the person was receiving social housing subsidy or a private rental subsidy at their last interview. We note that not all zero cost outcomes are necessarily positive; one participant was homeless at the time of the last interview, and three were living with extended family. On the positive side, nine were sustaining a private rental with no NSW Government subsidy.

Step 3: Preparation of raw data matrix. Following calibration of conditions and outcomes, the next step is to prepare a data matrix of raw outcome and condition scores for each case. This is a significant preliminary stage prior to formal analysis and requires considerable engagement with empirical data from the cases to appropriately apply scores using the explicit criteria developed for evaluating degree of membership in each condition (Step 4). A truth table is then constructed (using the *fsQCA Version 3.0* software package) with raw data based on membership scores for conditions and outcomes. A truth table is a synthetic display that enables rigorous exploration of different causal recipes that may be operating when a given condition is present or absent.

As a result of Steps 2 and 3, variables were transformed into conditions and outcomes with levels between 0 and 1. The definitions and mean score (or proportion of cases with each condition or outcome present) are provided in Table A26. In some cases, it was obvious whether a condition was present (coded as 1) or absent (coded as 0). For example,' Aged over 25' was either present or absent and so was a 0 if absent and 1 if present. In other cases, we had to apply judgement to define which levels of variable would be 0 and which would be 1. In some cases, this was difficult, and we used 'fuzzy' coding. This can be seen in the example of the original variable 'Case management support journey', which was treated in the QCA as 'Case management consistency.' In some cases, this variable required a score of mostly or partially consistent rather than belonging clearly to one category or the other.

TABLE A26. PROPORTION OF CASES WITH EACH CONDITION PRESENT OR ABSENT IN THE SAMPLE (0 IS ABSENT AND 1 IS PRESENT)

Condition	Definition	N	Mean	Std. deviation
Product	0=Rent Choice only, 1=Opportunity Pathways and Rent Choice	19	.4737	.51299
Aged over 25 years	0=25 and under, 1=Over 25	19	.4737	.51299
Female	0=Male, 1=Female	19	.8421	.37463
Inner regional	0=City, 1=Inner regional	19	.4737	.51299
Aboriginality	0=Not Aboriginal, 1=Aboriginal	19	.3158	.47757
Children in the home	0=No children in the home, 0.5=One or more child aged 9–18 in the home, 1=One or more child aged under 8 in the home.	19	.6316	.43596
Social support	0=No social support, 0.5=One or two friends, 1=Network of support	19	.5526	.28357
Case management consistency	0=No consistent case management, 0.33=Some positive case management, 0.67=Periods of multiple positive case management, 1=Consistent case management	19	.5084	.30306
Employment or education	0=No sustained employment or education, 1=Employment/ education participation increasing over the research period	19	.5789	.50726
PWI score change	0=No change or negative change in PWI, 1=Positive change in PWI	12	.5833	.51493
History of family dysfunction	0=Functional family background, 1=Dysfunctional family background	19	.6842	.47757
Current threat	0=No current threats, 1= Current threats	19	.2105	.41885

Condition	Definition	N	Mean	Std. deviation
Access to vehicle	0=No access to a vehicle, 0.5=Variable access to a vehicle, 1=Access to a vehicle	19	.7105	.30349
Social housing background	0=No social housing background, 0.5=Some previous contact, 1=Contact with social housing as a child	19	.4211	.38236
Trauma	0=None revealed, 0.85=None revealed but suspected, 1=Trauma revealed	19	.9921	.03441
Outcome: Housing stability	*0=Stable, 1=Not stable*	*19*	*.5263*	*.51299*
Outcome: Housing NSW subsidy	*0=No public or private rental subsidy, 1=Public or private rental subsidy*	*19*	*.3684*	*.49559*

Step 4: Analysis of necessary conditions. The *fsQCA Version 3.0* software package was used in this step and Step 5 to analyse conditions relating to the two outcomes (that is, stability and subsidy receipt). The first outcome was housing stability over the last two years (10 of the 19 were found to be not stable – a mean of .5263) and the second outcome was a NSW public or private rental subsidy (7 of the 19 were found to be in receipt of a NSW public or private rental subsidy – a mean of .3684).

Step 5: Analysis of sufficient conditions. Standard analysis in fsQCA software applies an algorithm to generate solution outputs that differ in terms of assumptions made about unobserved configurations. These outputs represent the different causal pathways that are sufficient for ensuring the outcome.

Step 6: Presentation and interpretation of results. In technical terms, there were no clear necessary conditions or combinations of conditions that were sufficient for either of our two outcome variables. We coded, recoded and reanalysed the data set a number of times to see if we were missing something. Unfortunately, we could not escape the conclusion that the causes or otherwise of people in maintaining housing stability or becoming independent of the need for housing support could not be reduced to any kind of pattern between these theoretically important variables. It is possible that our sample was too small. However, the more likely conclusion, supported by much existing literature, is that life is too complex to be reduced to a formula for success.

TABLE A27. QCA ANALYSIS OF CONDITIONS NECESSARY FOR STABLE HOUSING

Conditions tested	Consistency	Coverage
Children in the home	0.550000	0.458330
Trauma	1.000000	0.530500
Social housing background	0.350000	0.437500
Access to vehicle	0.700000	0.518510
Current threat	0.200000	0.500000
History of family dysfunction	0.700000	0.538460
Employment or education	0.700000	0.636360
Case management consistency	0.460000	0.483430
Social support	0.600000	0.571420
Aboriginality	0.200000	0.333330
Inner regional	0.300000	0.333330
Aged over 25 years	0.600000	0.666660
Product	0.500000	0.555550

Note: Conditions are considered necessary if their consistency scores are very high (≥0.9), and relevant if the coverage score is greater than 0.5.

TABLE A28. QCA ANALYSIS OF CONDITIONS NECESSARY FOR HOUSING INDEPENDENCE

Conditions tested	Consistency	Coverage
Children in the home	0.357143	0.208333
Trauma	1	0.371353
Social housing background	0.428571	0.375
Access to vehicle	0.571429	0.296296
Current threat	0.142857	0.25
History of family dysfunction	0.714286	0.384615
Employment or education	0.285714	0.181818
Case management consistency	0.571429	0.414079
Social support	0.571429	0.380952
Aboriginality	0.285714	0.333333
Inner regional	0.428571	0.333333
Female	0.571429	0.25
Aged over 25 years	0.285714	0.222222
Product	0.571429	0.444444

Note: Conditions are considered necessary if their consistency scores are very high (≥0.9), and relevant if the coverage score is greater than 0.5.

No data are presented on causally important 'solution pathways' as none reached a consistency threshold of 0.75, which was used to distinguish configurations of conditions that are subsets of the outcome from those that are not.[11,12] That is, we could not find causal pathways that meet generally accepted standards for the identification of reliable and valid causal pathways.

[11] Ragin CC (2008) Redesigning social inquiry: Fuzzy sets and beyond. University of Chicago Press, Chicago and London.
[12] Schneider SQ and Wagemann C (20012) Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis. Cambridge University Press, London.

APPENDIX 5 COST-BENEFIT ANALYSIS

A5.1 RENT CHOICE

APPROACH

We have conducted an ex-post Cost-Benefit Analysis (CBA) that incorporates outcomes identified from the linked administrative data analysis together with estimates of future costs and benefits.

The CBA has been prepared from the perspective of the Australian community, in this case being primarily NSW citizens, the NSW Government and the Australian Government.

The analysis covers the implementation of Rent Choice over the five-year period 1 July 2016 to 30 June 2021. During this period, 15,230 Rent Choice applications were approved and 9,822 were activated. Our analysis period, which reflects a mix of actual and estimated costs and benefits from the 9,822 Rent Choice activations, extends beyond 30 June 2021 to capture relevant costs and benefits attributable to the 9,822 Rent Choice activations.

Costs and benefits are expressed in 2020–2021 prices with the present value of cost and benefit streams (both past and future) calculated after applying a social discount rate of 7%. Sensitivity testing has been undertaken at 3% and 10%.

Those costs and benefits that cannot be quantified and monetised have been described in qualitative terms.

COUNTERFACTUAL

CBA compares the state of the world with the initiative against the state of the world without the initiative. The counterfactual is an estimate of what would have happened in the absence of the initiative.

There are challenges in establishing a suitable comparison group (or counterfactual) to measure the impact of Rent Choice. These were discussed in Section A3.1.

For the linked data analysis, comparisons have been drawn between the recipient and matched comparison groups for the Rent Choice Start Safely and Rent Choice Youth products. Clients of these two products represent 95% of the 9,822 Rent Choice subsidy type activations over the five-year period 1 July 2016 to 30 June 2021.

The recipient group comprises participants who raised an application prior to 30 June 2019 that resulted in a Rent Choice activation. The comparison group is a comparable matched subset drawn from those who applied for housing assistance over the three-year period 1 July 2016 to 30 June 2019.

Although linked data were available to 30 June 2021, the composition of both the recipient group and comparison group was restricted to applications prior to 30 June 2019 to ensure there was at least a two-year period over which to observe outcomes.

SUMMARY

This section provides detailed explanation of how costs and benefits were identified, estimated and valued.

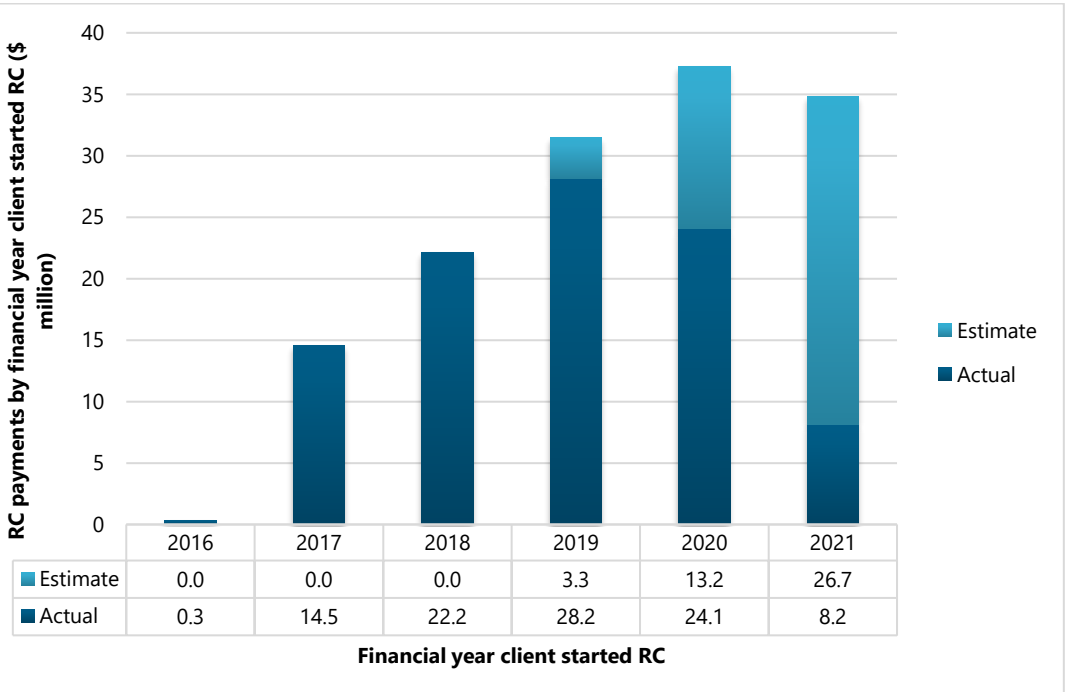
HOUSING SUBSIDY COSTS

The analysis covers the implementation of Rent Choice over the five-year period 1 July 2016 to 30 June 2021. During this period, 15,230 Rent Choice applications were approved and 9,822 were activated.

Housing subsidy costs reflect total subsidies provided to the 9,822 Rent Choice applications activated prior to 30 June 2021. This includes actual subsidies provided to those Rent Choice clients prior to 30 June 2021 plus estimates of subsidies provided to them over the remainder of their assistance period.

We estimate that the total cost of housing subsidies for the 9,822 Rent Choice activations to 30 June 2021 is approximately $140.6 million (an average of $14,314 per Rent Choice client) with the breakdown by cohort (being the financial year the client activated Rent Choice) as shown in Figure A18.

FIGURE A18. RENT CHOICE PAYMENTS BY FINANCIAL YEAR THE CLIENT STARTED IN RENT CHOICE

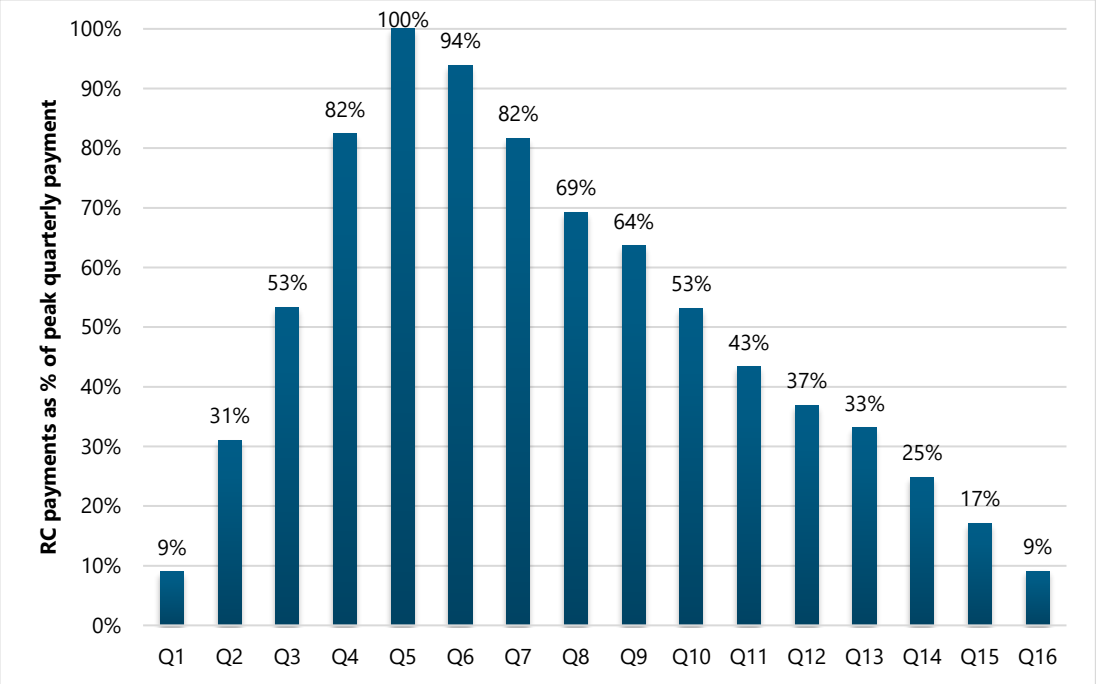


	2016	2017	2018	2019	2020	2021
Estimate	0.0	0.0	0.0	3.3	13.2	26.7
Actual	0.3	14.5	22.2	28.2	24.1	8.2

Actual housing subsidy costs to 30 June 2021 were derived from the administrative dataset. Estimates of housing subsidies provided after 30 June 2021 by cohort have been modelled based on the profile of quarterly payments made for cohorts of clients starting with Rent Choice in FY 2017–18, FY 2018–19 and FY 2019–20.

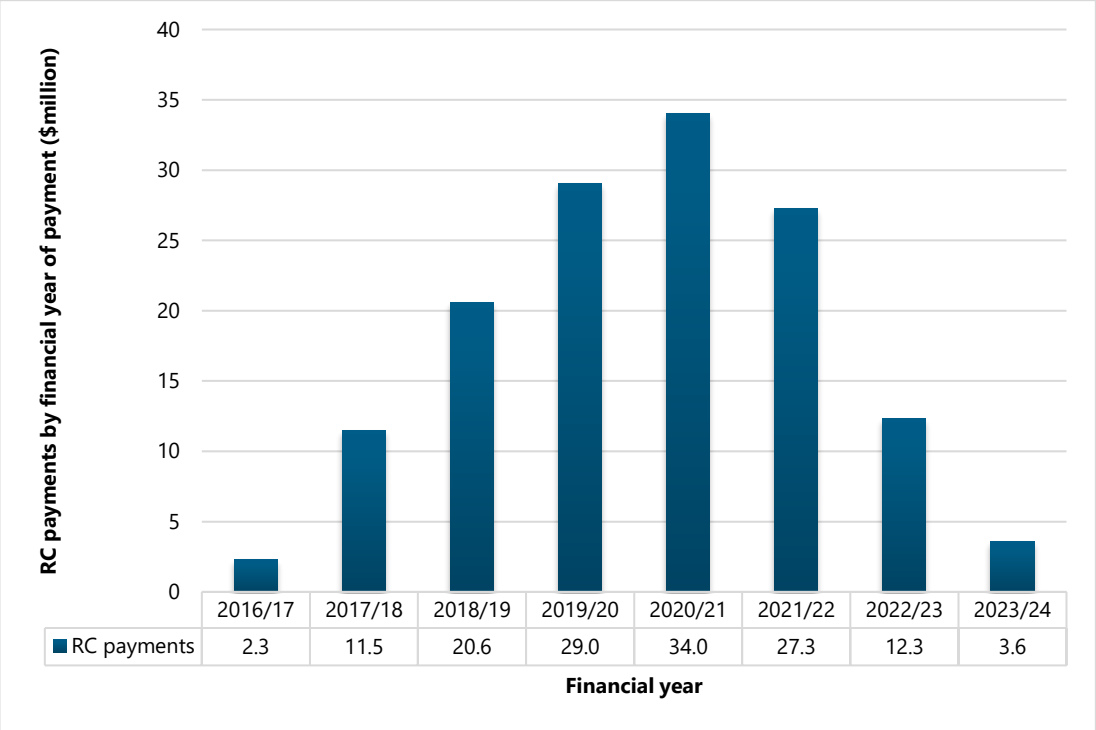
For the cohort of clients starting Rent Choice in any financial year, total quarterly Rent Choice payments progressively increase as more clients activate a subsidy, peak in the fifth quarter (being the first quarter in which all clients in the cohort can receive a full quarter of subsidy), then progressively decrease as clients exit Rent Choice and tapering takes effect, as shown in Figure A19.

FIGURE A19. PROFILE OF TOTAL QUARTERLY RENT CHOICE PAYMENTS FOR THE COHORT STARTING RENT CHOICE IN A PARTICULAR FINANCIAL YEAR



Modelling Rent Choice payments gives rise to estimates of Rent Choice payments by financial year totalling $140.6 million as shown in 0.

FIGURE A20. RENT CHOICE PAYMENTS, BY FINANCIAL YEAR



Average subsidies per client by product type are shown in Table A29. The entire stream of subsidies by financial year has been converted to a present value as of 2020–2021 after applying a social discount rate of 7%.

TABLE A29. AVERAGE RENT CHOICE SUBSIDY PER CLIENT, BY PRODUCT TYPE

	Rent Choice Start Safely	Rent Choice	Rent Choice – Other	Total
	85%	10%	5%	100%
Undiscounted				
Total Rent Choice subsidy (million)	$ 119.5	$ 14.1	$ 7.0	$140.6
Clients activating	7,713	1,621	488	9,822
Average subsidy	$15,494	$8,673	$14,405	$14,314
Present value 2020–2021 discounted at 7%				
Total Rent Choice subsidy (million)	$123.7	$14.6	$7.3	$145.6
Clients activating	7,713	1,621	488	9,822
Average subsidy	$16,041	$8,980	$14,914	$14,820

HOUSING SUPPORTS

Clients suitable for Rent Choice are identified through the Housing Pathway assessment process. In addition to the housing subsidy costs outlined above, Rent Choice has the following additional support elements:

- detailed assessment
- tenancy facilitation
- brokerage
- support coordination
- review (tapering assessments)
- exit assessment
- post-program evaluation.

Except for brokerage and support coordination, these support elements are provided by Client Service Officers and are collectively referred to as casework costs.

In general, casework is more labour intensive when a client first enters the program (when needs assessment and tenancy facilitation are carried out) and reduces over the course of the program (when assessments of tapering subsidies and exit assessments are carried out).

In addition to casework costs, brokerage and support coordination was also made available for Rent Choice clients. Brokerage includes services, material aid, financial aid and specialist services to help the client to establish and sustain their tenancy. Support coordination is the coordination of supports identified in the client's support plan.

We have based our estimates of housing support costs on detailed analysis of casework, brokerage and support coordination costs undertaken by Department of Communities and Justice (DCJ) in FY 2018–19. In that financial year:

- 43% of the clients were in their first year of the program where detailed needs assessment and tenancy facilitation were carried out, and the client moved into privately rented accommodation
- 48% of the clients were in second or third year of the program where reviews are conducted to assess the tapering subsidy and an exit assessment was carried out if the client exited the program
- 9% of the clients were in fourth year of the program where an exit assessment and post-program evaluation were carried out.

The FY 2018–19 costing analysis estimated costs of casework, brokerage and support coordination as a percentage of total Rent Choice housing subsidies in that year as shown in Table A30.

TABLE A30. RENT CHOICE HOUSING SUPPORT COSTS AS A PERCENTAGE OF RENT CHOICE HOUSING SUBSIDIES

Housing support element	Support element as proportion of total Rent Choice housing subsidies
Casework	56.7%
Brokerage	5.7%
Support coordination	7.7%

We have assumed that costs of providing these housing support elements as a proportion of the total Rent Choice housing subsidy remain consistent over time for the 9,822 clients activating prior to 30 June 2021. This gives rise to estimates of Rent Choice housing support costs as shown in Table A31.

We have also tested our assumptions against other estimates of housing support costs per client and concluded that our assumptions are reasonable.

TABLE A31. SUMMARY OF RENT CHOICE HOUSING SUPPORT COSTS ($MILLION)

Financial year	Casework	Brokerage and support coordination	Total
30 June 2017	1.3	0.3	1.6
30 June 2018	6.5	1.5	8.0
30 June 2019	11.7	2.8	14.4
30 June 2020	16.5	3.9	20.3
30 June 2021	19.3	4.6	23.9
30 June 2022	15.5	3.7	19.1
30 June 2023	7.0	1.7	8.7
30 June 2024	2.0	0.5	2.5
Total	79.7	18.8	98.6

We have allocated costs by product type on the basis that housing support costs are the same for all Rent Choice clients. This gives rise to housing support costs by product type shown in Table A32 and unit costs per client shown in Table A33.

TABLE A32. RENT CHOICE HOUSING SUPPORT COSTS, BY PRODUCT TYPE ($MILLION)

	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Undiscounted				
Housing supports				
- Casework	$62.6	$13.2	$4.0	$79.7
- Brokerage and support coordination		$18.8		$18.8
Total	$62.6	$32.0	$4.0	$98.6
Present value 2020–2021 discounted at 7%				
Housing supports				
- Casework	$64.8	$13.6	$4.1	$82.5
- Brokerage and support coordination		$19.5		$19.5
Total	$64.8	$33.1	$4.1	$102.0

TABLE A33. HOUSING SUPPORT COSTS PER RENT CHOICE CLIENT, BY PRODUCT TYPE

	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Undiscounted				
Housing supports				
- Casework	$8,116	$8,116	$8,116	$8,116
- Brokerage and support coordination	$1,918	$1,918	$1,918	$1,918
Total	$10,034	$10,034	$10,034	$10,034
Present value 2020–2021 discounted at 7%				
Housing supports				
- Casework	$8,403	$8,403	$8,403	$8,403
- Brokerage and support coordination	$1,986	$1,986	$1,986	$1,986
Total	$10,389	$10,389	$10,389	$10,389

PROGRAM MANAGEMENT COSTS

Program management costs comprise salary costs, salary on-costs and non-labour costs for housing staff engaged in each initiative. We have estimated these based on analysis of costs for Rent Choice Start Safely and Rent Choice Youth in FY 2020–21 provided to us by DCJ. For Rent Choice – Other, we estimated costs based on Rent Choice Start Safely and Rent Choice Youth (see Table A34).

Salary costs were derived by applying grade salaries to estimates of staff FTE by grade working on the initiative. Salary on-costs comprise superannuation, payroll tax, annual leave loading, long service leave and workers compensation insurance. Non-labour costs comprise allocation of the following operating expenses – telephone, telecommunications, IT, training and development, and travel and accommodation.

We have assumed that these costs apply across each of the five financial years over the period 1 July 2016 to 30 June 2021, and then taper in subsequent financial years as program management (for the 9,822 clients activating prior to 30 June 2021) naturally reduces to management of a diminishing number of clients still in the program.

We have not included corporate and head office costs within estimates of program management costs. Whilst these costs are required for DCJ to continue operating and to provide necessary infrastructure to support frontline service delivery, they are not directly attributable to delivering services or initiatives.

TABLE A34. SUMMARY OF RENT CHOICE PROGRAM MANAGEMENT COSTS ($MILLION)

Financial year	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Undiscounted				
30 June 2017	$0.47	$0.25	$0.04	$0.76
30 June 2018	$0.47	$0.25	$0.04	$0.76
30 June 2019	$0.47	$0.25	$0.04	$0.76
30 June 2020	$0.47	$0.25	$0.04	$0.76
30 June 2021	$0.47	$0.25	$0.04	$0.76
30 June 2022	$0.19	$0.10	$0.02	$0.31
30 June 2023	$0.09	$0.05	$0.01	$0.15
30 June 2024	$0.03	$0.01	$0.00	$0.04
Total	$2.66	$1.41	$0.23	$4.30
Present value 2020–2021 discounted at 7%	**$2.40**	**$1.27**	**$0.21**	**$3.88**

REDUCED USE OF COMMUNITY AND PUBLIC HOUSING

Linked data analysis for Rent Choice Start Safely and Rent Choice Youth participants over the first two years shows the community and public housing outcomes presented in Table A35. Outcomes are presented for each year separately.

In summary, the difference in difference technique indicates that Rent Choice participants (the recipient group) have a materially reduced use of community and public housing in both their first and second year of the program than the comparison group.

TABLE A35. PUBLIC AND COMMUNITY HOUSING OUTCOMES IN FIRST TWO YEARS FOLLOWING RENT CHOICE RECEIPT

	Recipient group		Comparison group		Change		Difference in difference
	Pre-Rent Choice	Post Rent Choice	Pre-AHA	Post AHA	Recipient	Comparison	
Rent Choice Start Safely							
Year 1							
% in community housing	6%	7%	11%	20%	1%	10%	-9%
% in public housing	6%	3%	12%	25%	-3%	12%	-15%
Year 2							
% in community housing	6%	9%	11%	22%	3%	11%	-8%
% in public housing	6%	5%	12%	27%	-1%	15%	-16%
Rent Choice Youth							
Year 1							
% in community housing	21%	21%	15%	24%	0%	9%	-9%
% in public housing	10%	4%	16%	20%	-6%	4%	-10%
Year 2							
% in community housing	21%	22%	15%	26%	1%	11%	-10%

% in public housing	10%	6%	16%	21%	-4%	5%	-9%

Applying two-year outcomes set out in Table A35 to clients who activated Rent Choice Start Safely and Rent Choice Youth over the period to 30 June 2021 would indicate reduced use of public and community housing in the first two years as shown in Table A36.

In the absence of outcome data for Rent Choice – Other products, we have assumed the same outcomes for those products as for Rent Choice Youth (see Table A36).

TABLE A36. REDUCED USE OF PUBLIC AND COMMUNITY HOUSING IN FIRST TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY

	Activations	Reduction in community housing		Reduction in public housing	
		Difference in difference	Units of housing	Difference in difference	Units of housing
Year 1					
Rent Choice Start Safely	7,713	-9%	-694	-15%	-1,157
Rent Choice Youth	1,621	-9%	-146	-10%	-162
Rent Choice – Other	488	-9%	-44	-10%	-49
Subtotal	9,822		-884		-1,368
Year 2					
Rent Choice Start Safely	7,713	-8%	-617	-16%	-1,234
Rent Choice Youth	1,621	-10%	-162	-9%	-146
Rent Choice – Other	488	-10%	-49	-9%	-44
Subtotal	9,822		-828		-1,424

The benefit of reduced use of public and community housing is the value or 'opportunity cost' of those resources. That is the value of those resources in their most attractive alternative use.

We have applied unit cost estimates for public and community housing that have been developed by DCJ for FY 2020–21 and which are shown in Table A37.[13] Estimates of unit cost per dwelling include the following cost elements:

- depreciation and amortisation
- personnel services (staff engaged in property management activities)
- property repairs and maintenance
- council and water rates
- property related expenses
- other expenses
- finance costs.

Unit costs are presented net of rent received as that represents the net cost of providing the housing. The client is assumed to be receiving a benefit at least equal to the rent paid.

TABLE A37. SOCIAL HOUSING COSTS PER DWELLING, NET OF RENT PAID (FY 2020–21)

	Unit cost	Average rent received	Net cost
Public housing cost per dwelling	$15,978	$7,828	$8,150
Community housing cost per dwelling	$16,176	$7,542	$8,634

Whilst some capital-related costs (depreciation/ amortisation of social housing) is included within the estimate of unit costs above, the opportunity cost of capital (for land and other assets) is not. We have applied the net costs of social housing summarised in Table A30 to ensure consistency of recipient of housing assets across the various programs of DCJ.

However, we note that the Australian Government's *Report on Government Services 2021* (ROGS 2021)[14] presents net recurrent expenditure per dwelling on public housing (comparable data for community housing is not available) both inclusive and exclusive of costs of capital for land and other assets as shown in Table A38.

TABLE A38. SOCIAL HOUSING COSTS PER DWELLING (FY 2020–21)

	NSW (ROGS 2021)	DCJ 2021
Net recurrent expenditure excluding cost of capital	$10,066	
Annual depreciation	$4,065	
Interest payments	$503	
Other	$93	

[13] Department of Communities and Justice Economics.

[14] Report on Government Services 2021, Part G, Section 18. Latest update: 3 June 2021, Table 18A.43.

	NSW (ROGS 2021)	DCJ 2021
Public housing cost per dwelling (excluding user cost of capital)	**$15,267**	**$15,978**
Cost of capital – land	$17,847	
Cost of capital – other assets	$15,045	
Subtotal	**$32,892**	
Public housing cost per dwelling (including user cost of capital)	**$48,159**	

Based on outcomes shown in Table A36 and the net cost of social housing shown in Table A38, we have estimated benefits from the program in the first two years as shown in Table A39.

TABLE A39. BENEFIT OF REDUCED USE OF PUBLIC AND COMMUNITY HOUSING IN FIRST TWO YEARS – UNDISCOUNTED

	Reduction in community housing		Reduction in public housing		Reduction in social housing	
	Units of Housing	Benefit	Units of Housing	Benefit	Units of Housing	Benefit
Year 1						
Rent Choice Start Safely	-694	-$5,993,464	-1,157	-$9,429,143	-1,851	-$15,422,606
Rent Choice Youth	-146	-$1,259,614	-162	-$1,321,115	-308	-$2,580,729
Rent Choice – Other	-44	-$379,205	-49	-$397,720	-93	-$776,925
Subtotal	**-884**	**-$7,632,283**	**-1,368**	**-$11,147,978**	**-2,252**	**-$18,780,261**
Year 2						
Rent Choice Start Safely	-617	-$5,327,523	-1,234	-$10,057,752	-1,851	-$15,385,275
Rent Choice Youth	-162	-$1,399,571	-146	-$1,189,004	-308	-$2,588,575
Rent Choice – Other	-49	-$421,339	-44	-$1,189,004	-93	-$1,610,343
Subtotal	**-828**	**-$7,148,434**	**-1,424**	**-$12,435,759**	**-2,252**	**-$19,584,193**

	Reduction in community housing		Reduction in public housing		Reduction in social housing	
	Units of Housing	Benefit	Units of Housing	Benefit	Units of Housing	Benefit
Average						
Rent Choice Start Safely	-656	-$5,660,494	-1,196	-$9,743,447	-1,851	-$15,403,941
Rent Choice Youth	-154	-$1,329,593	-154	-$1,255,059	-308	-$2,584,652
Rent Choice – Other	-46	-$400,272	-46	-$793,362	-93	-$1,193,634
Rent Choice total	**-856**	**-$7,390,359**	**-1,396**	**-$11,791,868**	**-2,252**	**-$19,182,227**

In quantifying total benefit, there are three key issues.

- How long would a client be expected to remain in social housing if they had not been 'diverted' to private housing through Rent Choice and had entered social housing instead?
- To what extent are the outcomes and benefits presented in Table A36 and Table A39 maintained over time?
- What is the impact of considering the opportunity cost of capital, or the freeing up of social housing stock, as a benefit of Rent Choice?

Analysis by DCJ indicates that on average, the tenure for social housing residents in 2018–2019 was 14.5 years, up from 13.6 years in 2016–17.[15]

Longitudinal analysis by DCJ of a cohort that received low-level Private Rental Assistance in 2004–05 found that over a 14-year period, 12% entered social housing.[16]

The linked data analysis also found that a proportion of Rent Choice clients entered social housing but at a lower rate than the matched comparison group. Over the two years studied, the difference between the recipient group and matched comparison group remained relatively constant.

If we assume that the difference between the recipient group and matched comparison group remained constant, and that average tenure for social housing residents was 15 years, then based on the average benefits shown in Table A39, this would give rise to a benefit in the order of $287.7 million as shown in 0.

[15] FACSIAR Economics Housing and Homelessness Investment Model (HHIM) – 2018/19 update, released March 2021.
[16] Ibid

TABLE A40. ESTIMATED TOTAL BENEFITS OF REDUCED USE OF PUBLIC AND COMMUNITY HOUSING – UNDISCOUNTED ($MILLION)

	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Reduction in public housing	$146.2	$18.8	$11.9	$176.9
Reduction in community housing	$84.9	$19.9	$6.0	$110.9
Total	**$231.1**	**$38.8**	**$17.9**	**$287.7**

Assuming benefits commence in 2020–2021, and applying a social discount rate of 7%, this would give rise to a present value of future benefits of $186.9 million as shown in Table A41.

TABLE A41. ESTIMATED TOTAL BENEFITS OF REDUCED USE OF PUBLIC AND COMMUNITY HOUSING – DISCOUNTED AT 7% ($MILLION)

	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Reduction in public housing	$95.0	$12.2	$7.7	$114.9
Reduction in community housing	$55.2	$13.0	$3.9	$72.0
Total	**$150.1**	**$25.2**	**$11.6**	**$186.9**

REDUCED USE OF SPECIALIST HOMELESSNESS SERVICES

Linked data analysis for Rent Choice Start Safely and Rent Choice Youth participants over the first two years shows the SHS outcomes identified in 0. Outcomes are presented for each year separately.

In summary, both the recipient group and comparison group have reduced use of Specialist Homelessness Services (SHS) in both their first and second year of the program. Further, the difference in difference technique indicates that Rent Choice participants (the recipient group) have a materially reduced use of SHS in both their first and second year of the program compared to the comparison group, although the reduction diminishes in the second year.

TABLE A42. SHS OUTCOMES IN THE TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY

	Recipient group		Comparison group		Change		Difference in difference
	Pre-Rent Choice	Post Rent Choice	Pre-AHA	Post-AHA	Recipient	Comparison	
Rent Choice Start Safely							
Year 1							
% with SHS presentation	68%	25%	63%	29%	-43%	-34%	-9%
Year 2							
% with SHS presentation	68%	20%	63%	17%	-48%	-46%	-2%
Rent Choice Youth							
Year 1							
% with SHS presentation	76%	35%	56%	34%	-41%	-22%	-19%
Year 2							
% with SHS presentation	76%	26%	56%	21%	-50%	-35%	-15%

Applying two-year outcomes set out in 0 to clients who activated Rent Choice Start Safely and Rent Choice Youth over the period to 30 June 2021 would indicate reduced SHS presentations in the first two years as shown in Table A43.

TABLE A43. REDUCED SHS PRESENTATIONS IN TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY

	Activations	Reduction in SHS presentations	
		Difference in difference	Reduction in SHS presentations
Year 1			
Rent Choice Start Safely	7,713	-9%	-694
Rent Choice Youth	1,621	-19%	-308
Rent Choice – Other	488	-14%	-68
Subtotal	9,822		-1,070
Year 2			
Rent Choice Start Safely	7,713	-2%	-154
Rent Choice Youth	1,621	-15%	-243
Rent Choice – Other	488	-8%	-39
Subtotal	9,822		-436

The benefit of reduced use of SHS is the value or opportunity cost of those resources. For purposes of this CBA, we have applied the 'recurrent cost per client accessing homelessness services' for NSW as derived from ROGS 2021.[17] This was estimated at $3,739 per client in 2020–21.

Based on outcomes shown in 0 and the cost of SHS shown in Table A43, we have estimated benefits from the program in the first two years as shown in 0. In the absence of outcome data for other Rent Choice products, we have assumed outcomes mid-way between those for Rent Choice Start Safely and Rent Choice Youth.

We have also assumed that benefits in subsequent years taper in line with the reduction in benefits in Year 2 compared to Year 1. This gives rise to the benefits shown in 0. Assuming benefits commence in 2020–21, and applying a social discount rate of 7%, this would give rise to a present value of future benefits.

[17] Report on Government Services 2021, Part G, Section 19, Table 19A.18.

TABLE A44. BENEFIT OF REDUCED SHS PRESENTATION IN FIRST TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY – UNDISCOUNTED

	Reduction in SHS presentations	
	No. of presentations	**Benefit**
Year 1		
Rent Choice Start Safely	-694	-$2,595,502
Rent Choice Youth	-308	-$1,151,575 –
Rent Choice – Other	-68	-$255,448
Subtotal	-1,070	-$4,002,525
Year 2		
Rent Choice Start Safely	-154	-$576,778
Rent Choice Youth	-243	-$909,138
Rent Choice – Other	-39	-$145,971
Subtotal	-436	-$1,631,887
Total		**-$5,634,411**

TABLE A45. TOTAL BENEFITS OF REDUCED SHS PRESENTATIONS ($MILLION)

	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Reduction in number of SHS presentations				
Year 1	-694	-308	-68	-1,070
Year 2	-154	-243	-39	-436
Year 3	-34	-192	-22	-249
Year 4	-8	-152	-13	-172
Year 5	-2	-120	-7	-129
Year 6	-0	-94	-4	-99
Year 7	-0	-75	-2	-77
Year 8	-0	-59	-1	-60
Year 9	-0	-46	-1	-47
Year 10	-0	-37	-0	-37
Total	-893	-1,325	-159	-2,377
Benefits of reduced SHS presentations, undiscounted	**$3.3**	**$5.0**	**$0.6**	**$8.9**
Present value 2020–21 of benefits of reduced SHS presentations, discounted at 7%	**$3.3**	**$4.2**	**$0.5**	**$8.0**

REDUCED USE OF HEALTH SERVICES

Linked data analysis for Rent Choice Start Safely over the first two years shows the health outcomes presented in Table A46. Outcomes are presented for each year separately. These represent only the health outcomes that could be identified from linked data analysis – in this case, reduced admitted hospital days and reduced usage of ambulatory mental health (MH) services.

In summary, the difference in difference technique indicates that Rent Choice Start Safely participants (the recipient group) have a reduced use of health services in the first and second year of the program compared to the comparison group. No material change was evident for Rent Choice Youth participants.

TABLE A46. HEALTH OUTCOMES FOR RENT CHOICE RECIPIENTS IN TWO YEARS FOLLOWING RECEIPT OF A SUBSIDY

	Recipient group		Comparison group		Change in year		Difference in difference
	Pre-Rent Choice	½r 1/2	Pre-AHA	½r 1/2	Recipient	Comparison	
Rent Choice Start Safely							
Year 1							
Admitted hospital days	3.1	2.1	3.3	3.2	-1.0	-0.2	-0.8
% using ambulatory MH services	19%	15%	21%	18%	-4%	-2%	-1%
Year 2							
Admitted hospital days	3.1	2.0	3.3	2.6	-1.1	-0.7	-0.4
% using ambulatory MH services	19%	13%	21%	16%	-6%	-4%	-2%

Applying two-year outcomes set out in Table A46 to clients who activated Rent Choice Start Safely over the period to 30 June 2021 would indicate reduced use of health services in the first two years as shown in Table A47.

TABLE A47. REDUCED USE OF HEALTH SERVICES IN FIRST TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY

	Activations	Reduction in use of health services	
Rent Choice Start Safely		Difference in difference	Reduction in use of health services
Year 1			
Admitted hospital days	7,713	-0.8	-6,170
% using ambulatory MH services	7,713	-1%	-77
Year 2			
Admitted hospital days	7,713	-0.4	-3,085
% using ambulatory MH services	7,713	-2%	-154

Admitted hospital days refers to any admission to an NSW public hospital during the year. Ambulatory MH services refer to the assessment, treatment, rehabilitation or care of non-admitted patients.

We have estimated a value per admitted hospital day avoided at $1,800 per day based on an average cost per separation for admitted acute care of $5,335 and an average number of admitted patient days per separation of three.[18] [19]

We have estimated a value for MH use of $4,560 based on a weighted average cost per episode for MH services reported in the National Hospital Cost Data Collection Report (FY 2019–20).[20]

[18] Australian Institute of Health and Welfare (2021). Admitted Patient Care 2020/21, Costs and Funding, Tables S7.1 and S7.2

[19] National Hospital Cost Data Collection Report: Public Sector, Round 24 (FY 2019–20).

[20] National Hospital Cost Data Collection Report: Public Sector, Round 24 (FY 2019–20).

We have also assumed that benefits in subsequent years taper in line with the reduction in benefits in Year 2 compared to Year 1. This gives rise to the benefits shown in Table A48.

TABLE A48. BENEFIT OF REDUCED USE OF HEALTH SERVICES IN FIRST TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY

	Reduction in use of health services		
Rent Choice Start Safely	**No. of presentations**	**Unit benefit**	**Total benefit**
Year 1			
Admitted hospital days	-6,170	$1,800	$11,106,000
% using ambulatory MH services	-77	$4,560	$351,120
Subtotal			$11,457,120
Year 2			
Admitted hospital days	-3,085	$1,800	$5,553,000
% using ambulatory MH services	-154	$4,560	$702,240
Subtotal			6,255,240
Total			**$17,712,360**

We have assumed that the decline in benefits observed from Year 1 to Year 2 continues over the next three years as presented in Table A49.

TABLE A49. TOTAL BENEFITS OF REDUCED HEALTH SERVICES USE OVER TIME

	Benefit ($million)
Year 1	$11.5
Year 2	$6.3
Year 3	$3.4
Year 4	$1.9
Year 5	$1.0
Benefits of reduced use of health services, undiscounted	**$24.0**
Present value 2020–21 of benefits of reduced use of health services, discounted at 7%	**$22.6**

CRIMINAL JUSTICE SYSTEM SAVINGS

Linked data analysis for Rent Choice Start Safely over the first two years shows the justice outcomes presented in Table A50. Outcomes are presented for each year separately. These represent only the justice outcomes that could be identified from linked data analysis.

In summary, the difference in difference technique indicates that the percentage of Rent Choice Start Safely participants (the recipient group) with a court finalisation for a proven offence (where the participant was the accused) is lower in both the first and second year of the program compared to the comparison group. No material change was evident for Rent Choice Youth participants.

TABLE A50. JUSTICE OUTCOMES IN FIRST TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY

	Recipient group		Comparison group		Change in year		Difference in difference
	Pre-Rent Choice	½r 1/2	Pre-AHA	½r 1/2	Recipient	Comparison	
Rent Choice Start Safely							
Year 1							
% with a court finalisation for a proven offence	11%	10%	12%	13%	-1%	1%	-2%
Year 2							
% with a court finalisation for a proven offence	11%	8%	12%	12%	-2%	0%	-3%

Linked data analysis indicates that if a Rent Choice Start Safely participant had a court finalisation in the financial year, then 17% of those participants were in custody and, if in custody, for an average of seven days.

DCJ estimates that the benefit of an avoided magistrates' court prosecution is $11,556 per person per episode (2020–21 values), and that an avoided adult custody stay (secure) saves $360/ day (2020–21 values). Applying these figures to the two-year outcomes set out in Table A50 for clients who activated Rent Choice Start Safely over the period to 30 June 2021 would indicate benefits of reduced court finalisations and avoided adult custody stays in the first two years as shown in Table A51.

We have not estimated benefits beyond the first two years.

TABLE A51. REDUCED COURT FINALISATIONS IN FIRST TWO YEARS FOLLOWING RECEIPT OF A RENT CHOICE SUBSIDY

	Activations	Reduction in court finalisations and custody days			
Rent Choice Start Safely		Difference in difference	Reduction in court finalisations	Reduction in custody days	Benefit ($million)
Year 1					
% with a court finalisation for a proven offence	7,713	-2%	-154	-184	$1.8
Year 2					
% with a court finalisation for a proven offence	7,713	-3%	-231	-275	$2.8
Benefit of reduction in court finalisations and custody days, undiscounted			-385		**$4.6**
Present value 2020–21 of benefits of reduction in court finalisations and custody days, discounted at 7%					**$4.4**

INCOME SUPPORT AND RENTAL ASSISTANCE PAYMENTS

Linked data analysis for Rent Choice Start Safely participants over the first two years shows the income support and rental assistance outcomes presented in 0. Outcomes are presented for each year separately.

In summary, the difference in difference technique indicates that Rent Choice Start Safely participants (recipient group) received materially higher income support and rental assistance payments in both the first and second year of the program than the comparison group.

Further, a higher proportion of Rent Choice Start Safely participants received rental assistance in both the first and second year of the program than the comparison group.

TABLE A52. RENT CHOICE START SAFELY INCOME SUPPORT AND RENTAL ASSISTANCE OUTCOMES IN FIRST TWO YEARS

	Recipient group		Comparison group		Change in year		Difference in difference
Rent Choice Start Safely	**Pre-Rent Choice**	**½r 1/2**	**Pre-AHA**	**½r 1/2**	**Recipient**	**Comparison**	
Year 1							
% with income support	90%	89%	89%	86%	-2%	-3%	1%
Avg. income support payments in the year ($)	15,832	17,732	16,083	17,155	1,899	1,072	828
% with rental assistance	84%	90%	71%	70%	6%	-1%	6%
Average rental assistance payment in the year	2,248	3,399	2,001	2,119	1,151	119	1,032
Year 2							
% with income support	90%	89%	89%	86%	-2%	-3%	1%
Avg. income support payments ($)	15,832	19,655	16,083	18,623	3,823	2,539	1,283
% with rental assistance	84%	85%	71%	61%	1%	-9%	10%
Average rental assistance payment in the year	2,248	3,146	2,001	2,016	898	15	883

Linked data analysis for Rent Choice Youth participants over the first two years shows the income support and rental assistance outcomes presented in Table A53. Outcomes are presented for each year separately.

In summary, the difference in difference technique indicates that Rent Choice Youth participants (the recipient group) received materially higher rental assistance payments in both the first and second year of the program than the comparison group and materially higher income support payments in the second year.

There was insufficient evidence to determine if a higher proportion of Rent Choice Youth participants received rental assistance or income support in either the first or second year of the program than the comparison group.

TABLE A53. RENT CHOICE YOUTH INCOME SUPPORT AND RENTAL ASSISTANCE OUTCOMES IN FIRST TWO YEARS

	Recipient group		Comparison group		Change in year		Difference in difference
Rent Choice Youth	**Pre-Rent Choice**	**½r 1/2**	**Pre-AHA**	**½r 1/2**	**Recipient**	**Comparison**	
Year 1							
% with income support	95%	94%	95%	96%	-1%	1%	-1%
Avg. income support payments in the year ($)	11,450	13,276	12,652	14,759	1,825	2,107	-281
% with rental assistance	71%	88%	49%	62%	16%	13%	4%
Average rental assistance payment in the year	924	2,389	817	1,233	1,465	415	1,049
Year 2							
% with income support	95%	92%	95%	90%	-4%	-5%	1%
Avg. income support payments ($)	11,450	16,707	12,652	16,711	5,257	4,059	1,198
% with rental assistance	71%	77%	49%	55%	5%	6%	-1%
Average rental assistance payment in the year	924	2,053	817	1,304	1,129	487	641

Applying the two-year outcomes set out in Table A53 to clients who activated Rent Choice Start Safely and Rent Choice Youth over the period to 30 June 2021 would indicate increased income support and rental assistance in the first two years as shown in Table A54.

TABLE A54. IMPACTS ON INCOME SUPPORT AND RENTAL ASSISTANCE IN FIRST TWO YEARS

Activations		Income/ rental support				
		Proportion receiving support (A)	Difference in proportion receiving (B)	Difference in $ support (C)	Average support payments (D)	Increased cost of support (A-B)*C+(B*D) ($million)
Income support						
Year 1						
Rent Choice Start Safely	7,713	90%	-	$828		$5.7
Rent Choice Youth	1,621	94%		$-281		-$0.4
Year 2						
Rent Choice Start Safely	7,713	89%	-	$1,283		$8.8
Rent Choice Youth	1,621	92%		$1,198		$1.8
Subtotal						**$15.9**
Present value 2020–21, discounted at 7%						
Rent Choice Start Safely						$14.0
Rent Choice Youth						$1.2
						$15.2
Rental support						
Year 1						
Rent Choice Start Safely	7,713	90%	6%	$1,032	$3,399	$6.7
Rent Choice Youth	1,621	88%	4%	$1,049	$2,389	$1.6
Year 2						
Rent Choice Start Safely	7,713	85%	10%	$883	$3,146	$5.1

	Activations	Income/ rental support				
		Proportion receiving support (A)	Difference in proportion receiving (B)	Difference in $ support (C)	Average support payments (D)	Increased cost of support (A-B)*C+(B*D) ($million)
Rent Choice Youth	1,621	**77%**	**-1%**	**$641**	**$2,053**	$0.8
Subtotal						**$14.2**

Present value 2020–2021, discounted at 7%	
Rent Choice Start Safely	$11.5
Rent Choice Youth	$2.4
	$13.8

QUALITATIVE FACTORS

Volume 1 of the *Future Directions Service Improvement Initiative* describes the experience of Rent Choice participants as compared to the broader population of housing clients. Analysis has been undertaken using the Personal Wellbeing Index, a measure of personal satisfaction across seven domains (standard of living, health, achieving in life, relationships, safety, community connectedness and future security).

That analysis found that whilst there this is evidence that Rent Choice participants have higher wellbeing than the broader housing client population, that may not necessarily be a program effect as it is likely there are existing differences between the groups that may contribute to participants receiving Rent Choice.

We have not sought to quantify any costs or benefits associated with any impacts on wellbeing.

SENSITIVITY ANALYSIS

OPPORTUNITY COST OF SOCIAL HOUSING

As discussed above, the benefit of reduced use of public and community housing is the value or opportunity cost of those resources. That is the value of those resources in their most attractive alternative use.

In our analysis, we have applied unit cost estimates for public and community housing that have been developed by DCJ. As we note, these unit costs ($8,634 for community housing and $8,150 for social housing) do not include the opportunity cost of funds tied up in the

capital (land and other assets) used to provide social housing (that is, the return that could have been generated if the funds were employed in their next best use).[21]

If we instead apply the ROGS 2021 net recurrent expenditure per dwelling on public housing of $48,159 (which includes user cost of capital),[22] this gives rise to significantly higher benefit values for reduced use of social housing and in turn a significantly higher net present value (NPV)/ benefit-cost ratio (BCR) as presented in Table A55.

Incorporating the user cost of capital is consistent with the principle of reporting or applying the full cost to government where the full costs can be measured accurately and aligns closely with the efficiency criterion in CBA.

[21] Report on Government Services 2013, 2.14.
[22] Report on Government Services 2021, Part G, Section 18: Latest update: 3 June 2021, Table 18A.43.

TABLE A55. SENSITIVITY ANALYSIS – SUMMARY RESULTS OF THE CBA FOR RENT CHOICE, REFLECTING THE OPPORTUNITY COST OF CAPITAL FOR SOCIAL HOUSING, DISCOUNTED AT 7% ($MILLION)

Category	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Present value 2020–21 of costs				
Housing subsidy	$123.7	$14.6	$7.3	$145.6
Housing supports				
- Casework	$64.8	$13.6	$4.1	$82.5
- Brokerage and support coordination		$19.5		$19.5
Program management costs	$2.4	$1.3	$0.2	$3.9
Total costs	**$190.9**	**$49.0**	**$11.6**	**$251.5**
Present value 2020–21 of benefits				
Reduced use of public housing	$561.1	$72.3	$45.7	$679.1
Reduced use of community housing	$307.7	$72.3	$21.8	$401.7
Reduced use of SHS	$3.3	$4.2	$0.5	$8.0
Reduced use of health services	$22.9			$22.9
Avoided criminal justice system costs	$4.4			$4.4
Total benefits	**$899.4**	**$148.7**	**$68.0**	**$1,116.2**
NPV	**$708.5**	**$99.8**		**$864.7**
BCR	**4.7**	**3.0**		**4.4**

DISCOUNT RATE

Our primary analysis has been conducted using a social discount rate of 7% in line with NSW Government recommendations for CBA.[23]

We have also conducted sensitivity analysis using a social discount rate of 3% and 10% as shown in Table A56 and Table A57.

Our sensitivity analysis indicates a small increase in NPV/ BCR at a 3% social discount rate and a small decrease in NPV/ BCR at a 10% discount rate.

[23] NSW Government Guide to Cost-Benefit Analysis (TPP17-03).

This largely reflects the impact of discount rates on future benefits (primarily reduced use of public and community housing), which are assumed to extend up to 15 years into the future.

TABLE A56. SENSITIVITY ANALYSIS – SUMMARY RESULTS OF CBA OF RENT CHOICE PROGRAM, DISCOUNTED AT 3% ($MILLION)

Category	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Costs				
Housing subsidy	$121.2	$14.3	$7.1	$142.6
Housing supports				
- Casework	$63.5	$13.3	$4.0	$80.8
- Brokerage and support coordination	$15.0	$3.2	$0.9	$19.1
Program management costs	$2.5	$1.3	$0.2	$4.1
Total costs	**$202.2**	**$32.1**	**$12.3**	**$246.6**
Benefits				
Reduced use of public housing	$119.8	$15.4	$9.8	$145.0
Reduced use of community housing	$69.6	$16.3	$4.9	$90.9
Reduced use of SHS	$3.3	$4.6	$0.6	$8.5
Reduced use of health services	$23.4			$23.4
Avoided criminal justice system costs	$4.5			$4.5
Total benefits	**$220.6**	**$36.4**	**$15.2**	**$272.2**
NPV	**$18.4**	**$4.3**		**$25.6**
BCR	**1.1**	**1.1**		**1.1**

TABLE A57. SENSITIVITY ANALYSIS – SUMMARY RESULTS OF CBA OF RENT CHOICE PROGRAM, DISCOUNTED AT 10% ($MILLION)

Category	Rent Choice Start Safely	Rent Choice Youth	Rent Choice – Other	Total
Costs				
Housing subsidy	$125.9	$14.8	$7.4	$148.1
Housing supports				
- Casework	$65.9	$13.9	$4.2	$84.0
- Brokerage and support Coordination	$15.6	$3.3	$1.0	$19.8
Program management costs	$2.3	$1.2	$0.2	$3.7
Total costs	**$209.7**	**$33.2**	**$12.8**	**$255.6**
Benefits				
Reduced use of public housing	$81.5	$10.5	$6.6	$98.7
Reduced use of community housing	$47.4	$11.1	$3.3	$61.8
Reduced use of SHS	$3.3	$3.9	$0.5	$7.7
Reduced use of health services	$22.1			$22.1
Avoided criminal justice system costs	$4.4			$4.4
Total benefits	**$158.6**	**$25.6**	**$10.5**	**$194.6**
NPV	-$51.1	-$7.6		-$61.0
BCR	0.8	0.8		0.8

A5.2 OPPORTUNITY PATHWAYS

APPROACH

We have conducted an ex-post CBA that incorporates outcomes identified from the linked administrative data analysis as well as estimates of future costs and benefits.

The CBA has been prepared from the perspective of the Australian community, in this case being primarily NSW citizens, the NSW Government and the Australian Government.

The analysis covers the implementation of Opportunity Pathways over the period 1 April 2019 to 30 June 2021. During this period, 3,173 clients were enrolled in Opportunity Pathways, approximately 50% in FY 2020–21 and 50% prior to FY 2020–21. Costs and benefits are expressed in 2020–21 prices with the present value of cost and benefit streams (both past and future) calculated after applying a social discount rate of 7%. Sensitivity testing has been undertaken at 3% and 10%.

Those costs and benefits that cannot be quantified and monetised have been described in qualitative terms.

COUNTERFACTUAL

CBA compares the state of the world with the initiative against the state of the world without the initiative. The counterfactual is an estimate of what would have happened in the absence of the initiative.

As discussed in more detail in Section A3.2, the analysis design effectively compares outcomes of the same people before and after they commenced participating in Opportunity Pathways.

Outcomes observed in the pre-program period forms the baseline and outcomes are measured against this baseline in the post-program period to determine the program effect.

In order to be able to compare changes in outcomes over time, the recipient group for the linked data analysis was limited to the 2,742 clients who were referred to Opportunity Pathways and commenced the program over the period 1 April 2019 to 30 June 2021, and with the linked data analysis continuing to 30 June 2022.

Outcomes observed for the 2,742 clients who were part of the linked data analysis have been applied to the 3,173 clients who were enrolled as we have no evidence that outcomes were any better or worse for clients not linked in the analysis.

SUMMARY

This section provides detailed explanation of how costs and benefits were identified, estimated and valued.

SERVICE PROVIDER AND BROKERAGE COSTS

Opportunity Pathways was developed to assist eligible participants to find or increase their employment with the appropriate support.

Service providers were contracted to provide staffing, establish or develop referral networks, locate potential clients and offer Opportunity Pathways to suitable clients. In addition, financial assistance (brokerage) was provided to some Opportunity Pathways participants to help them overcome financial barriers to participation (for example, childcare, transport, clothing and support services).

Costs associated with service provision and brokerage are summarised in Table A58.

TABLE A58. SERVICE PROVIDER AND BROKERAGE COSTS ($MILLION)[24]

	FY 2018–19	FY 2019–20	FY 2020–21	Total	Present value 20–2021 discounted at 7%
Contracted service provider costs	$3.0	$11.5	$9.5	**$24.0**	**$25.2**
Financial assistance provided (brokerage)	$1.8	$2.2	$2.3	**$6.3**	**6.7**

PROGRAM MANAGEMENT COSTS

Program management costs comprise salary costs, salary on-costs and non-labour costs for housing staff engaged in Opportunity Pathways. We have estimated these based on analysis of costs for Opportunity Pathways in FY 2020–21 provided to us by DCJ (see Table A59).

Salary costs were derived by applying grade salaries to estimates of staff FTE by grade working on Opportunity Pathways. Salary on-costs comprise superannuation, payroll tax, annual leave loading, long service leave and workers compensation insurance. Non-labour costs comprise allocation of the following operating expenses – telephone, telecommunications, IT, training and development, and travel and accommodation.

We have assumed that these costs apply across the three financial years in which the recipient group were referred to Opportunity Pathways and commenced Opportunity Pathways (1 April 2019 to 30 June 2021). Opportunity Pathways closed across NSW in June 2022 and from 1 July 2022 was replaced by Opportunity Pathways – Social Impact Investment in four locations.

TABLE A59. PROGRAM MANAGEMENT COSTS ($MILLION)

	FY 2018–19	FY 2019–20	FY 2020–21	Total	Present value 20–2021 discounted at 7%
Program management costs	$0.3	$0.3	$0.3	**$0.9**	**$1.0**

We have not included corporate and head office costs within estimates of program management costs. Whilst these costs are required for DCJ to continue operating and to provide necessary infrastructure to support frontline service delivery, they are not directly attributable to delivering services or initiatives.

[24] DCJ.

INCREASED ENROLMENT IN VOCATIONAL EDUCATION AND TRAINING

Linked data analysis found borderline evidence for a 10% increase in vocational enrolments, particularly in the early stages of the program (p-value 0.06). Vocational enrolments comprise enrolments in 'modules' of vocational education, apprenticeships and traineeships. 'Modules' are the 'units of competency' or individual 'subjects' that make up a Vocational and Educational Training (VET) qualification.

Based on the first quarter of Opportunity Pathways participation (when most enrolments can be expected to occur), the enrolment rate is 4.8 percentage points higher with Opportunity Pathways than without it. Across the cohort of 3,173 clients, this would equate to an additional 152 enrolments.

Linked data analysis found that 19% of vocational enrolments were for Certificate I or II qualifications, 19% were for the more advanced Certificate III or IV qualifications, and 58% were for other qualifications.

2021 data from the National Centre for Vocational Education Research (NCVER) indicates that the completion rate for VET qualifications for individuals who commenced training in 2016 was 43.4% for all qualifications.[25] Ordinarily, this would indicate that out of 152 additional enrolments amongst the general population, 66 would complete their qualification. Linked data analysis suggests that the course completion rate amongst the Opportunity Pathways cohort, at 31%, is lower, suggesting that out of 152 additional enrolments, 47 would complete.

Undertaking VET offers good employment outcomes. NCVER research of VET student outcomes for 2021 found that 64.4% had improved employment status after training, and employment levels after training were 84.3% for 'subject only' completers, 80.2% for 'short course' completers and 73.1% for qualification completers.[26]

Australian Bureau of Statistics (ABS) data shows that on average, median weekly earnings increase with highest educational qualification. For example, median weekly earnings in August 2021 for a person with a Certificate III or IV are $1,200, some $300 more than for a person with no non-school qualifications.[27]

DCJ estimates a present value of the lifetime benefit per person of $232,766 for someone gaining a Tertiary Certificate (Certificate III or IV) compared to just completing Year 12 (NCVER data indicates that Year 12 was the highest school level completed for 64.4% of VET students who completed programs in 2020 with the remainder completing Year 11 or lower.)[28]

[25] National Centre for Vocational Education Research. (2021). Australian vocational education and training statistics: completion and attrition rates for apprentices and trainees 2020, NCVER, Adelaide.
[26] National Centre for Vocational Education Research. (2021). VET student outcomes 2021, DataBuilder analysis.
[27] Australian Bureau of Statistics. (2021). 633.0 Characteristics of Employment, Australia, August 2021, Table 6.1 Median weekly earnings of employees, Table 6.1, released 14 December 2021.
[28] National Centre for Vocational Education Research. (2021). Apprentices and trainees: December quarter 2021, DataBuilder analysis.

This lifetime benefit reflects the income differential referred to above, an increase in likelihood of employment (compared to the employment rate of someone who completes Year 12) and a time period of approximately 14 years.

Amongst the Opportunity Pathways cohort, 19% of vocational enrolments were for Certificate I or II qualifications, 19% were for the more advanced Certificate III or IV qualifications, and 58% were for other qualifications. ABS data indicates that median weekly earnings for the lowest level of non-school qualification was $1,050 – that is, $150 more than for a person with no non-school qualifications.[29] As this difference in weekly median earnings (compared to completing Year 12) is half that of those gaining a Tertiary Certificate (Certificate III or IV), we have assumed a present value of the lifetime benefit per person of $116,000.

This gives rise to a present value of increased lifetime earnings for the 47 additional completions of approximately $5.5 million.

This is an indication of the benefits of increased enrolment in VET. Whilst the Opportunity Pathways cohort may not reflect the characteristics of the general population; this is mitigated to some extent by our assumptions about the mix of VET enrolments and completion rates. It should be noted that additional non-completers may also realise employment benefits that are not reflected in estimates above.

REDUCED INCOME SUPPORT PAYMENTS

85.9% of people were receiving income support benefits of $3,677 per quarter at time of referral to Opportunity Pathways.

Based on linked data analysis, there is evidence that participating in Opportunity Pathways is associated with a statistically significant reduction in government income support benefits.

In Year 1, income support paid each quarter is on average $122 less per participant with Opportunity Pathways than without it, and in Year 2 on average $280 less per participant with Opportunity Pathways than without it.

Reductions in income support benefits paid are on average $292 less per participant with Opportunity Pathways than without Opportunity Pathways from quarter 6 after commencing Opportunity Pathways and appear to sustain thereafter. We have assumed these continue beyond Year 2 as shown in 0.

Informing this assumption is the trajectory of the Career Pathways participant cohort, which suggests the decrease in income support benefits associated with Opportunity Pathways may be sustained over a longer time period.

[29] ABS. (2021). 633.0 Characteristics of Employment, Australia, August 2021, Table 6.1 Median weekly earnings of employees, Table 6.1, released 14 December 2021.

TABLE A60. REDUCED INCOME SUPPORT BENEFITS

	No. of clients	Average quarterly reduction in income support benefits	Reduction in income support benefits ($million)	Present value 2020–2021 discounted at 7%
Year 1	3,173	$122	$1.5	
Year 2	3,173	$280	$3.6	
Year 3	3,173	$292	$3.7	
Year 4	3,173	$292	$3.7	
Year 5	3,173	$292	$3.7	
Total			**$16.2**	**$15.6**

In estimating the present value as of 2020–2021 of reductions in income support payments made or received, we have assumed reductions attribute 50% to the Opportunity Pathways cohort that enrolled prior to 30 June 2020 and 50% to the Opportunity Pathways cohort that enrolled in FY 2020–21, with first year of reduction for these two cohorts occurring in FY 2019–20 and FY 2020–21 respectively.

Income support payments are financial transfers between the Australian Government and NSW citizens that do not involve the use of economic resources. Best practice is to exclude these payments from a CBA. They have no impact on net benefits, as the benefits to one group (reduced income support payments made by government) are offset by costs to another group (reduced income support payments received by NSW citizens).[30]

However, the distributional impacts are important, and we have reflected those in 0.

Implicit in a reduction in income support payments made or received is an increase in earnings by individuals receiving income support benefits. We have assumed that income support benefits taper by 50 cents for every dollar in additional income. So, a reduction of $16.2 million in income support reflects an increase in income of $32.4 million.

Our tapering assumption is based on income tests for JobSeeker payments that typically reduce payments by 50 cents for each dollar of fortnightly income earned over a minimum threshold.

Also implicit in an increase in income of $32.4 million is an expectation that a social housing tenant can contribute more rent. Assuming an increase in rent paid of 25 cents for every dollar in additional income, that would translate to an increase in rent paid or received of $8.1 million and an increase in income (net of additional rent payments) of $24.3 million.

A summary of associated costs and benefits is presented in 0.

[30] NSW Government Guide to Cost-Benefit Analysis (TPP17-03).

TABLE A61. IMPACTS OF REDUCED INCOME SUPPORT PAYMENTS ($MILLION)

Category			Present value 2020–2021 discounted at 7%
Benefits			
Additional income benefits (net of additional rent payments)	NSW citizens	$24.3	$23.4
Additional rent payments received	NSW Government	$8.1	$7.8
Transfers			
Reduced income support payments made	Commonwealth	$16.2	$15.6
Reduced income support payments received	NSW citizens	($16.2)	($15.6)

REDUCED USE OF SHS

Participation in Opportunity Pathways is associated with a substantive and statistically significant reduction in SHS presentations.

As can be seen in Volume 1 of the Future Directions Service Improvement Initiatives evaluation the reduction in SHS presentations grows over the first four quarters after referral and then stabilises.

In Year 1, the average quarterly SHS presentation rate decreases by 2.0 percentage points from 6.6% (without Opportunity Pathways) to 4.6% (with Opportunity Pathways). In Year 2, the average quarterly SHS presentation rate decreases by 2.9 percentage points from 6.4% (without Opportunity Pathways) to 3.5% (with Opportunity Pathways).

In the absence of data after two years, we have assumed the reduction in the quarterly SHS presentations rate continues after two years but declines over time as shown in 0.

The benefit of reduced use of SHS is the value or opportunity cost of those resources. For the purposes of this CBA, we have applied the 'recurrent cost per client accessing homelessness services' for NSW as derived from ROGS 2021.[31] This was estimated at $3,739 per client in 2020–21.

Based on the outcomes referred to above and an estimated cost of accessing SHS of $3,739 per client, we have estimated benefits from the program for the 3,173 participants in Opportunity Pathways as shown in 0.

[31] Report on Government Services 2020/21, Part G, Section 19, Table 19A.18.

TABLE A62. BENEFIT OF REDUCED SHS PRESENTATIONS ($MILLION)

	Percentage point reduction in average quarterly SHS presentations	Reduction in number of SHS presentations	Benefit of reduced SHS presentations ($million)	Present value 2020–2021 discounted at 7%
Measured				
Year 1	2.0%	254	$0.9	
Year 2	2.9%	368	$1.4	
Estimated				
Year 3	2.4%	305	$1.1	
Year 4	1.9%	241	$0.9	
Year 5	1.4%	178	$0.7	
Total			**$5.0**	**$4.9**

In estimating the present value as of 2020–21 of benefits, we have assumed benefits attribute 50% to the Opportunity Pathways cohort that enrolled prior to 30 June 2020 and 50% to the Opportunity Pathways cohort that enrolled in FY 2020–21, with the first year of benefits for these cohorts occurring in FY 2019–20 and FY 2020–21 respectively.

CRIMINAL JUSTICE SYSTEM SAVINGS

Based on linked data analysis, there is evidence of a statistically significant reduction in court finalisations for a proven offence.

In Year 1, the average quarterly court finalisation rate decreases by 0.5 percentage points from 4.1% (without Opportunity Pathways) to 3.6% (with Opportunity Pathways). In Year 2, the average quarterly court finalisation rate decreases by 0.6 percentage points from 4.2% (without Opportunity Pathways) to 3.6% (with Opportunity Pathways).

In the absence of data after two years, we have assumed the reduction in quarterly court finalisations decline over time as shown in Table A63.

Linked data analysis indicates that of Opportunity Pathways participants who had a court finalisation in the financial year, 35% were in custody and if so were there for an average of 33 days.

DCJ estimates that the benefit of an avoided magistrates' court prosecution of $11,556 per person per episode (2020–21 values), and that an avoided adult custody stay (secure) saves $360/ day (2020–21 values). Applying these figures to the two-year outcomes set out in 0 for the 2,742 clients who commenced Opportunity Pathways over the period 1 April 2019 to 30 June 2021 would indicate benefits of reduced court finalisations and avoided adult custody stays in the first two years as shown in Table A63.

TABLE A63. BENEFIT OF REDUCED COURT FINALISATIONS ($MILLION)

	% point reduction in quarterly court finalisations	Reduction in number of court finalisations	Reduction in number of custody days	Benefit of reduced court finalisations ($million)	Benefit of reduced custody days ($million)	Total benefit ($million)	Present value 2020–2021 discounted at 7%
Year 1	0.5%	63	733	$0.7	$0.3	$1.0	
Year 2	0.6%	76	880	$0.9	$0.3	$1.2	
Year 3	0.4%	51	586	$0.6	$0.2	$0.8	
Year 4	0.3%	38	440	$0.4	$0.2	$0.6	
Year 5	0.2%	25	293	$0.3	$0.1	$0.4	
Total				**$2.9**	**$1.1**	**$4.0**	**$3.9**

In estimating the present value of future benefits, we have assumed benefits attribute 50% to the Opportunity Pathways cohort that enrolled prior to 30 June 2020 and 50% to the Opportunity Pathways cohort that enrolled in FY 2020–21, with the first year of benefits for these cohorts occurring in FY 2019–20 and FY 2020–21 respectively.

REDUCED USE OF HEALTH SERVICES

Based on linked data analysis, there is borderline evidence for both a 10% reduction in public hospital admissions and a 10% decrease in ambulatory MH use.

Public hospital admission refers to any admission to a public hospital in the year. In Year 1, the average quarterly hospital admission rate decreases by 0.8 percentage points from 6.2% (without Opportunity Pathways) to 5.4% (with Opportunity Pathways). In Year 2, the average quarterly hospital admission rate decreases by 0.6 percentage points from 5.4% (without Opportunity Pathways) to 4.8% (with Opportunity Pathways).

Our estimated value of a public hospital admission avoided is based on an average cost per separation for admitted acute care of $5,335.[32] [33]

Based on the outcomes identified above and the benefit of a public hospital admission avoided of $5,335, we have estimated benefits of reduced public hospital admissions from Opportunity Pathways for the 3,173 participants as shown in 0.

Given the evidence of impact is 'borderline', we have not estimated further benefits after Year 2.

[32] Australian Institute of Health and Welfare. (2021). Admitted Patient Care 2020/21, Costs and Funding, Tables S7.1 and S7.2.
[33] National Hospital Cost Data Collection Report: Public Sector, Round 24 (FY 2019–20).

TABLE A64. BENEFIT OF REDUCED HOSPITAL ADMISSIONS

	% point reduction in quarterly hospital admissions	Reduction in number of hospital admissions	Benefit of reduced hospital admissions ($million)
Year 1	0.8%	102	$0.6
Year 2	0.6%	76	$0.4
Total			**$1.0**

Ambulatory MH services refer to the assessment, treatment, rehabilitation or care of non-admitted patients. In Year 1, the average quarterly ambulatory MH use decreases by 0.7 percentage points from 8.1% (without Opportunity Pathways) to 7.4% (with Opportunity Pathways). In Year 2, the average quarterly ambulatory MH use decreases by 1.4 percentage points from 8.6% (without Opportunity Pathways) to 7.2% (with Opportunity Pathways).

We have estimated a value for MH use of $4,560 based on a weighted average cost per episode for MH services reported in the National Hospital Cost Data Collection Report (FY 2019–20).[34]

Based on outcomes identified above and the benefit of an ambulatory MH episode avoided of $4,560, we have estimated benefits of reduced use of MH services for the 3,173 participants in Opportunity Pathways as shown in Table A65.

Given the evidence of impact is 'borderline' we have not estimated further benefits after Year 2.

TABLE A65. BENEFIT OF REDUCED USE OF MH SERVICES

	% point reduction in quarterly ambulatory MH use	Reduction in episodes of ambulatory MH	Benefit of ambulatory MH services avoided ($million)
Year 1	0.7%	89	$0.4
Year 2	1.4%	178	$0.8
Total			**$1.2**

A summary of health system savings reflecting both reduced hospital admissions and reduced use of MH services is shown in Table A66.

[34] National Hospital Cost Data Collection Report: Public Sector, Round 24 (FY 2019–20).

TABLE A66. SUMMARY OF HEALTH SYSTEM SAVINGS ($MILLION)

Category		Present value 2020–21 discounted at 7%
Benefits		
Reduced hospital admission	$1.0	
Reduced use of MH services	$1.2	
Total	**$2.2**	**$2.2**

In estimating the present value of future benefits, we have also assumed benefits attribute 50% to the Opportunity Pathways cohort that enrolled prior to 30 June 2020 and 50% to the OP cohort that enrolled in FY 2020–21, with the first year of benefits for these cohorts occurring in FY 2019–20 and FY 2020–21 respectively.

QUALITATIVE FACTORS

Volume 1 of the Future Directions Service Improvement Initiatives evaluation report describes the experience of Opportunity Pathways participants as compared to the broader population of DCJ clients who have applied for or are receiving DCJ Housing products and services. Data on the broader population of DCJ clients is drawn from the DCJ Housing Outcomes Satisfaction Survey in 2019, 2020 and 2021, with that data balanced for a range of factors (for example, age and gender).

Analysis has been undertaken using the Personal Wellbeing Index, a measure of personal satisfaction across seven domains (standard of living, health, achieving in life, relationships, safety, community connectedness and future security).

That analysis found that whilst there appears to be some evidence that Opportunity Pathways participants had higher wellbeing than the broader population of DCJ clients (at least in 2019 and 2020), the evidence was not sufficient to draw meaningful conclusions.

We have not sought to quantify any costs or benefits associated with any impacts on wellbeing.

SENSITIVITY ANALYSIS

We have undertaken sensitivity analysis for estimations of additional income benefits (net of additional rent payments) and for social discount rates.

ADDITIONAL INCOME BENEFITS (NET OF ADDITIONAL RENT PAYMENTS)

Additional income benefits (net of additional rent payments) represent approximately 50% of total benefits, making the results of the CBA particularly sensitive to assumptions made in estimating these benefits. Those assumptions include the following.

- Participating in Opportunity Pathways is associated with a statistically significant reduction in income support benefits paid by government (based on linked data analysis).
- Reductions in income support benefits paid are on average $292 less per participant from quarter 6 after commencing Opportunity Pathways and are assumed to sustain as shown in 0 (based on the trajectory of Career Pathways participants).
- Implicit in a reduction in income support payments made or received is an increase in earnings by individuals receiving income support benefits. We have assumed that income support benefits taper by 50 cents for every dollar in additional income.
- Also implicit in an increase in income is an expectation that a social housing tenant can contribute more rent. We assume an increase in rent paid of 25 cents for every dollar in additional income.

We have tested the results of the CBA for reductions in income support benefits paid not sustaining at $292 per quarter. Instead, we have assumed a 25% reduction in Year 4 and a further 25% reduction in Year 5, as shown in Table A67.

TABLE A67. SENSITIVITY ANALYSIS – REDUCED INCOME SUPPORT BENEFITS

	No. of clients	Average quarterly reduction in income support benefits	Reduction in income support benefits ($million)	Present value 2020–21 discounted at 7%
Year 1	3,173	$122	$1.5	
Year 2	3,173	$280	$3.6	
Year 3	3,173	$292	$3.7	
Year 4	3,173	$219	$2.8	
Year 5	3,173	$146	$1.9	
Total			**$13.4**	**$12.8**

This has the effect of reducing the present value of benefits from $47.5 million to $42.2 million, resulting in a reduction in NPV from $14.6 million to $9.3 million, and a reduction in BCR from 1.4 to 1.3 (0). Transfer payments also reduce from $15.6 million to $12.8 million (Table A69).

TABLE A68. SENSITIVITY ANALYSIS – SUMMARY OF RESULTS OF CBA OF OPPORTUNITY PATHWAYS, DISCOUNTED AT 7% ($MILLION)

Category		Present value 2020–21 discounted at 7%
Costs		
Service provider costs	NSW Government	$25.2
Financial assistance provided (brokerage)	NSW Government	$6.7
Program management costs	NSW Government	$1.0
Total costs		**$32.9**
Benefits		
Increased enrolment in vocational education	NSW citizens	$5.5
Additional income benefits (net of additional rent payments)	NSW citizens	$19.3
Additional rent payments received	NSW Government	$6.4
Reduced use of SHS	NSW Government	$4.9
Criminal justice system savings	NSW Government	$3.9
Avoided health system costs	NSW Government	$2.2
Total benefits		**$42.2**
NPV		$9.3
BCR		1.3

TABLE A69. SENSITIVITY ANALYSIS – TRANSFER PAYMENTS FOR OPPORTUNITY PATHWAYS, DISCOUNTED AT 7% ($MILLION)

Category		Present value 2020–21 discounted at 7%
Reduced income support payments made	Commonwealth	$12.8
Reduced income support payments received	NSW citizens	($12.8)

DISCOUNT RATE

Our primary analysis has been conducted using a social discount rate of 7% in line with NSW Government recommendations for CBA.[35]

We have also conducted sensitivity analysis using a social discount rate of 3% and 10% as shown in Table A70 and 0. A lower discount rate has the effect of reducing the present value of costs by $1.0 million and increasing the present value of benefits by $2.1 million, resulting in a small increase in NPV/ BCR.

TABLE A70. SUMMARY RESULTS OF CBA, DISCOUNTED AT 3% ($MILLION)

Category		Present value 20–2021 discounted at 3%
Costs		
Service provider costs	NSW Government	$24.5
Financial assistance provided (brokerage)	NSW Government	$6.5
Program management costs	NSW Government	$0.9
Total costs		**$31.9**
Benefits		
Increased enrolment in vocational education	NSW citizens	$5.5
Additional income benefits (net of additional rent payments)	NSW citizens	$23.9
Additional rent payments received	NSW Government	$8.0
Reduced use of SHS	NSW Government	$4.9
Criminal justice system savings	NSW Government	$3.9
Avoided health system costs	NSW Government	$2.2
Total benefits		**$48.4**
NPV		**$16.5**
BCR		**1.5**

[35] NSW Government Guide to Cost-Benefit Analysis (TPP17-03).

TABLE A71. TRANSFER PAYMENTS, DISCOUNTED AT 3% ($MILLION)

Category		Present value 20–21 discounted at 3%
Reduced income support payments made	Commonwealth	$15.9
Reduced income support payments received	NSW citizens	($15.9)

TABLE A72. SUMMARY RESULTS OF CBA, DISCOUNTED AT 10% ($MILLION)

Category		Present value 2020–2021 discounted at 10%
Costs		
Service provider costs	NSW Government	$25.8
Financial assistance provided (brokerage)	NSW Government	$6.9
Program management costs	NSW Government	$1.0
Total costs		**$33.7**
Benefits		
Increased enrolment in vocational education	NSW citizens	$5.5
Additional income benefits (net of additional rent payments)	NSW citizens	$23.0
Additional rent payments received	NSW Government	$7.7
Reduced use of SHS	NSW Government	$4.8
Criminal justice system savings	NSW Government	$3.8
Avoided health system costs	NSW Government	$2.2
Total benefits		**$46.9**
NPV		$13.2
BCR		1.4

TABLE A73. TRANSFER PAYMENTS, DISCOUNTED AT 10% ($MILLION)

Category		Present value 2020–2021 discounted at 10%
Reduced income support payments made	Commonwealth	$15.3
Reduced income support payments received	NSW citizens	($15.3)

APPENDIX 6 ABORIGINAL REFERENCE GROUP

We acknowledge the wisdom of our Aboriginal Reference Group whose insight has shaped our consultation with Aboriginal people and our understanding of the implications of our findings for Aboriginal people (Table A74).

TABLE A74. MEMBERS OF OUR ABORIGINAL REFERENCE GROUP

Name	Position	Organisation
Simon Jordan (Chair)	Director, Aboriginal Partnerships and Projects	ARTD Consultants
Emily Yorkston	Partner	ARTD Consultants
Anna Ashenden	Principal, Consulting	Social Ventures Australia
Michelle Craig	Chief Executive Officer	Aboriginal Reference Unit, Tenancy Advice and Advocacy Network
Jonathan Wassell	Executive Director – Risk Management and Governance	NSW Aboriginal Land Council
Stephen Powter	Business Development Advisor	NSW Aboriginal Land Council
Andreas Vorst-Parkes	A/ Manager, Aboriginal Outcomes – Housing Strategy, Policy and Commissioning	NSW Department of Communities and Justice
Sonya Parter	Senior Program Officer, Housing Directorate, Commissioning Division	NSW Department of Communities and Justice
Amy Parry	Program Officer	NSW Department of Communities and Justice
Leetina Smith	Senior Program Officer, Aboriginal Outcomes Housing	NSW Department of Communities and Justice
James Smith (Uncle Jimmy)	Cultural Educator	Metropolitan Local Aboriginal Land Council