

Report

Economic Evaluation of the Catalyst Program

Prepared for

Uniting Vic.Tas

June 2026

Key contact

Matt Healey

First Person Consulting Pty Ltd

ABN 98 605 466 797

matt@fpconsulting.com.au

www.fpconsulting.com.au

Executive Summary

The Catalyst Program is a community-based, non-residential alcohol and other drug (AOD) rehabilitation program providing structured post-withdrawal stabilisation and continuing-care support. This economic evaluation assesses the social and economic value generated by Catalyst Tasmania in 2025, drawing on program outcome data, national evidence, and cost-benefit analysis (CBA) methods aligned with Tasmanian Government and Australian Treasury guidance.¹

Catalyst Tasmania delivered support to **48 participants** at a total cost of **\$457,506**, with strong engagement: **73% completed at least half of the program, with 54% completing the full program**. Across multiple validated tools - including K10, K5, BSCQ-8, SDS, WHOQoL-8, TOM, and ATOP²-participants demonstrated substantial improvements in psychological distress, self-efficacy, substance use, quality of life, and relational wellbeing. These outcomes are consistent with the broader evidence base on AOD stabilisation and recovery programs.

The CBA quantifies benefits over a five-year horizon, applying a 7% discount rate and modelling a counterfactual relapse trajectory based on published relapse rates and Catalyst's observed outcome improvements. Only benefits assessed as monetisable, material, and supported by strong evidence were included.

The analysis finds that Catalyst generates **\$1.43 million in total benefits** across government, participants, and employers. The largest value arises from reduced morbidity and mortality, improved participant wellbeing, increased employment and earnings, and reduced reliance on health, justice, and homelessness systems.

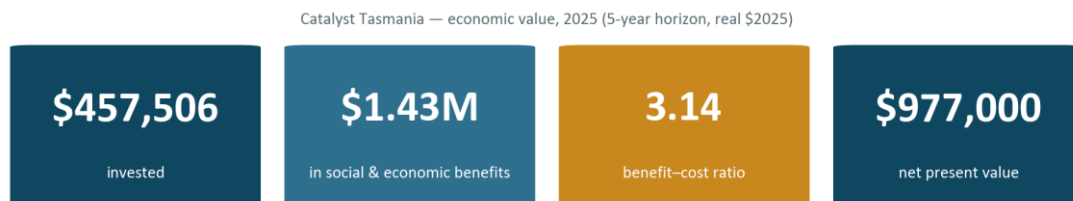
Overall, Catalyst delivers a **Benefit-Cost Ratio (BCR) of 3.14³** and a **Net Present Value (NPV) of \$977,000⁴**, meaning the program generates more than three dollars in social and economic value for every dollar invested. This return sits within the range reported for similar AOD treatment programs. In the Australian Institute of Criminology's review of drug treatment programs, those most like Catalyst returned between about \$2.70 and \$3.25 for every dollar invested, and returns across treatment programs were often higher again (Voce & Sullivan, 2022). The program also returns an estimated **\$851,000 in other fiscal benefits** to the Tasmanian Government, exceeding the cost of delivery.

¹ Cost-benefit analysis (CBA) is a standard economic method that compares the total costs of a program with the dollar value of the benefits it produces, so the two can be weighed against each other.

² These are validated clinical questionnaires used in alcohol and other drug treatment. In brief: K10 and K5 measure psychological distress; BSCQ-8 measures a person's confidence to resist substance use; SDS measures how dependent a person is; WHOQoL-8 measures quality of life; TOM measures self-perception and relationship satisfaction; and ATOP measures substance use and day-to-day functioning.

³ The benefit-cost ratio (BCR) is the total value of benefits divided by the total cost. A BCR above 1.0 means benefits outweigh costs; a BCR of 3.14 means every \$1 invested returns \$3.14 in value.

⁴ Net present value (NPV) is the value of all benefits minus all costs, expressed in today's dollars. A positive NPV means the program is worth more than it costs.



For every \$1 invested, Catalyst returns \$3.14 in social and economic value.

Figure 1. Catalyst Tasmania's cost-benefit analysis result, 2025 (five-year horizon, real \$2025, discounted at 7%).

These findings show that Catalyst is a **high-value investment** that reduces harm, strengthens participant wellbeing and economic participation, alleviates pressure on government services, and contributes to safer, more stable communities.

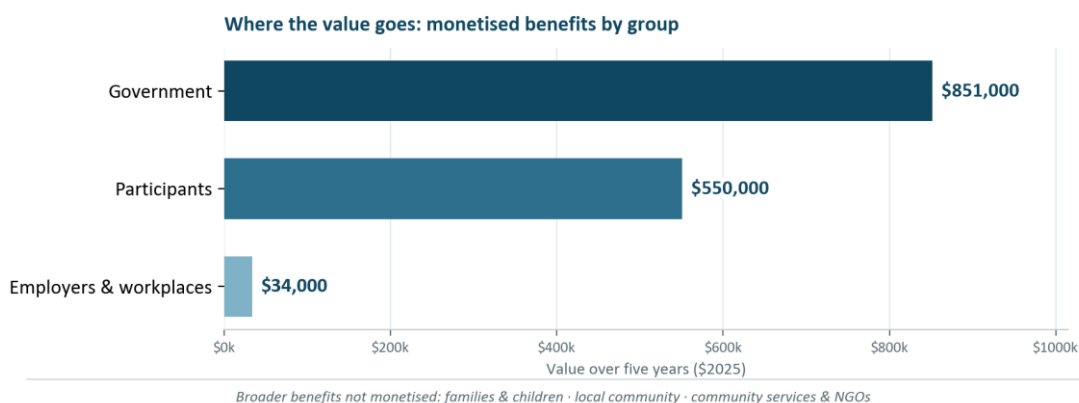


Figure 2. Monetised benefits by beneficiary group over five years (real \$2025). Benefits to families, the local community and community services were not monetised.

When isolating just the return on investment to the Tasmanian Government, the analysis showed that **for every \$1 invested returns \$1.88 in avoided government expenditure**. The avoided costs to government were estimated at \$851,000 over the five-year time horizon, resulting in a net present value (costs avoided less initial investment) of approximately \$400,000. **These results show that Catalyst is a high-value investment that delivers sustained fiscal benefits over time.**

Contents

1	Introduction.....	1
1.1	Background.....	1
1.2	Purpose of this economic evaluation	1
2	The approach	2
2.1	Methodology.....	2
2.2	Limitations	3
3	Findings	4
3.1	A summary of Catalyst Tasmania costs and outcomes for 2025	4
3.2	What are the social and economic benefits of the Catalyst Program?	6
3.3	Economic Evaluation Results.....	8
4	Conclusion	14
5	References	15
Appendix 1	The counterfactual - estimating relapse trajectories	21
Appendix 2	Catalyst Program Outcome Data.....	23
Appendix 3	Benefit map and rapid evidence review summary	26
Appendix 4	Assessment of benefit inclusion in CBA.....	30
Appendix 5	Model inputs.....	35

List of Tables

Table 1.	CBA general parameters	2
Table 2:	Basic program information	4
Table 3.	Summary of results across outcome measures	5
Table 4:	High-level benefit map.....	7
Table 5.	Summary of benefits included in the CBA	8
Table 6:	Catalyst Tasmania CBA summary results (real \$2025, discounted 7%)	9
Table 7.	Cost benefit analysis – sensitivity test results	13
Table 8.	Tools and use in different Catalyst Programs	23
Table 9.	Catalyst tool results across Catalyst programs	24

Table 10: Government benefit map and evidence summary	26
Table 11. Participant benefit map and evidence summary.....	26
Table 12. Families and children benefit map and evidence summary	27
Table 13. Employers and workplaces benefit map and evidence summary	28
Table 14. Local community benefit map and evidence summary	29
Table 15. Community services and NGOs benefit map and evidence summary.....	29
Table 16. Assessment of benefit inclusion in CBA - Government	30
Table 17. Assessment of benefit inclusion in CBA - Participants.....	31
Table 18. Assessment of benefit inclusion in CBA - Employers and workplaces.....	32
Table 19. Assessment of benefit inclusion in CBA – Community services and NGOs	33
Table 20. Assessment of benefit inclusion in CBA - Families and children.....	33
Table 21. Model inputs: Government - health system presentations.....	35
Table 22. Model inputs: Government - crime and justice system.....	37
Table 23. Model inputs: Government - housing instability and homelessness.....	40
Table 24. Model inputs: Government - earnings and productivity	41
Table 25. Model inputs: Government - mortality and morbidity.....	43
Table 26. Model inputs: Participants - improved wellbeing.....	44
Table 27. Model inputs: Participants - increased participant income.....	45
Table 28. Model inputs: Participants - reduced personal spending on substances	45
Table 29. Model inputs: Employers and workplaces - avoided absenteeism	46
Table 30. Model inputs: Employers and workplaces - avoided job replacement (turnover) costs	47

List of Figures

Figure 1. Catalyst Tasmania's cost-benefit analysis result, 2025 (five-year horizon, real \$2025, discounted at 7%).	iii
Figure 2. Monetised benefits by beneficiary group over five years (real \$2025). Benefits to families, the local community and community services were not monetised.....	iii
Figure 3. Share of participants who improved on each validated measure. Source: Catalyst Tasmania (2025) for K5, K10 and BSCQ-8; earlier Catalyst programs (2020) for WHOQoL-8, SDS and ATOP.	5
Figure 4. Benefits to government by component over five years (real \$2025).	11
Figure 5. Benefits to participants by component over five years (real \$2025).	12

Figure 6. Benefits to employers and workplaces by component over five years (real \$2025). .13

Abbreviations

FPC	First Person Consulting
ABS	Australian Bureau of Statistics
AHRI	Australian Human Resources Institute
AIC	Australian Institute of Criminology
AIHW	Australian Institute of Health and Welfare
AOD	alcohol and other drug
ASVB	Australian Social Value Bank
ATO	Australian Taxation Office
ATOP	Australian Treatment Outcome Profile
ATOS	Australian Treatment Outcome Study
BCR	benefit-cost ratio
BSCQ-8	Brief Situational Confidence Questionnaire (8-item)
CBA	cost-benefit analysis
DSP	Disability Support Pension
ED	emergency department
ICU	intensive care unit
K5	Kessler 5 psychological distress scale
K10	Kessler 10 psychological distress scale
NDARC	National Drug and Alcohol Research Centre
NGO	non-government organisation
NHCDC	National Hospital Cost Data Collection
NIDA	National Institute on Drug Abuse (United States)
NPV	net present value
OIA	Office of Impact Analysis
QoL	quality of life
RoGS	Report on Government Services
SDS	Severity of Dependence Scale
SHS	Specialist Homelessness Services
SURE	Substance Use Recovery Evaluator

TOM	Treatment Outcomes Measurement
VSL	value of statistical life
VSLY	value of a statistical life year
WHO	World Health Organization
WHOQoL-8	World Health Organization Quality of Life scale (8-item)

1 Introduction

1.1 Background

Uniting Vic.Tas's Catalyst Program is a community-based, non-residential alcohol and other drug (AOD) rehabilitation program. It provides 5-6 weeks of structured, intensive post-withdrawal support, equipping participants with coping skills and reinforcing motivation to sustain change. Catalyst has operated for over a decade across three sites in Victoria, and for two years in Hobart through a pilot co-funded by Uniting and the Uniting Church Synod of Victoria & Tasmania.

A Youth Catalyst stream operates in Hobart for young people aged 16-24, with a specialist episode also delivered at Ashley Youth Detention Centre in collaboration with Tasmania's Youth Justice. In 2025, Catalyst was awarded the Program Award for Excellence by the Alcohol, Tobacco & other Drugs Council Tasmania.

1.2 Purpose of this economic evaluation

To support an evidence-led case for investment, Uniting commissioned FPC, in partnership with Fran Demetriou Consulting, to:

- undertake an independent assessment that strengthens confidence in Catalyst's outcomes and impact
- explore the extent to which the Catalyst Program Logic is supported by evidence
- quantify avoided costs and offsets associated with reduced demand on other service systems.

This economic evaluation assesses the social and economic value generated by the program over a five-year period. It quantifies benefits to:

- Government
- Participants
- Employers and workplaces

The evaluation complements the program's existing outcomes data, which show strong improvements in psychological distress, substance use, and self-efficacy. **All findings relate to costs and benefits derived in 2025 for the Catalyst Tasmania.**

2 The approach

2.1 Methodology

The analysis follows standard cost-benefit analysis (CBA) principles and draws on guidance from:

- The Office of Impact Analysis (OIA)
- The Australian Treasury CBA Guidelines
- The Tasmanian Government's Project and Business Case Guidance, including Treasury's expectations for economic appraisal
- The Australian Social Value Bank (ASVB)⁵ for wellbeing valuation

Key methodological features related to our approach include:

- **Five-year time horizon** with discounting applied consistently across all benefits
- **Counterfactual modelling** to estimate what would have occurred without the program (see Appendix 1)
- **Evidence-based incidence and unit costs**, drawing on Australian Institute of Health and Welfare (AIHW), National Drug and Alcohol Research Centre (NDARC), Australian Institute of Criminology (AIC), Productivity Commission reporting, and peer-reviewed studies
- **Program data integration**, including improvements in validated measures such as the K10, K5, BSCQ-8, and substance use⁶

Only benefits assessed as **monetisable and material** are included in the CBA. Specifics on the methodology and inputs into the CBA are described throughout the report and provided in the appendices. Table 1 presents the general parameters have been used in the CBA model, with more detail on what each means following.

Table 1. CBA general parameters

Parameter	Value
Discount rate	7% (real)
Appraisal period	5 years post-program
Program years	2025
Base year	FY 2024-25

⁵ Wellbeing valuation using a conservative partial relief ASVB proxy: Wellbeing valuation represents an estimate of social value, not a financial return or payment. It reflects improvements in quality of life rather than direct fiscal or income gains.

⁶ These are validated clinical questionnaires used in alcohol and other drug treatment. In brief: K10 and K5 measure psychological distress; BSCQ-8 measures a person's confidence to resist substance use; SDS measures how dependent a person is; WHOQoL-8 measures quality of life; TOM measures self-perception and relationship satisfaction; and ATOP measures substance use and day-to-day functioning.

Discount rate

When we compare costs and benefits that happen at different points in time, we need a way to express them in today's dollars. The discount rate reflects the idea that:

- money today is worth more than money in the future, and
- future benefits should be adjusted so they can be compared fairly with today's costs.

A real discount rate of 7% was applied in line with economic evaluation guidance.

Appraisal period

The appraisal period is the length of time over which we count the benefits of the program.

For this analysis, we assume that the positive changes created by the program continue for **five years after the program ends**. Five years is long enough to capture meaningful, lasting impacts, but not so long that it overstates the program's effect.

The CBA model assumes a linear erosion of benefits that are attributable to the program over this time period, with the greatest attributable benefits occurring in the first year following delivery of the program, and by the fifth year the attributable benefits have eroded entirely.

Program years

These are the years during which the program actually operated. All program costs are assigned to these financial years. This ensures the analysis reflects the real timing of investment.

Base year

The base year is the "reference point" for the analysis. All costs and benefits - whether they occurred earlier or will occur in the future - are converted into FY 2024–25 dollars.

This avoids confusion caused by inflation or changes in the value of money over time. It means everything is expressed in the same year's dollars, making the results easy to interpret and compare.

2.2 Limitations

While this analysis provides an estimate of Catalyst's social and economic value, several limitations should be noted:

- The evaluation relies on short-term outcome data collected at program exit, and Catalyst does not yet have longitudinal follow-up data to directly measure relapse, employment trajectories, or long-term wellbeing. As a result, relapse probabilities and downstream avoided events were modelled using conservative assumptions informed by published evidence rather than observed long-term outcomes.
- Some benefits known to arise from AOD stabilisation-such as reduced family violence, improved parenting capacity, and broader community impacts-were not monetised because suitable incidence or unit-cost data were unavailable or insufficiently robust.
- Wellbeing valuation uses a partial-relief ASVB proxy, which intentionally understates the full value of improvements in mental health and quality of life.

Together, these limitations mean the results are more likely to underestimate than overestimate the true social and economic value generated by the program.

3 Findings

3.1 A summary of Catalyst Tasmania costs and outcomes for 2025

3.1.1 Program costs and outputs

The program delivered support to 48 participants at a total cost of \$457,506, resulting in a cost per participant of \$9,531. Just over half of all participants (26 people, 54%) completed the full program, while a further 9 participants (19%) completed at least half of the program, but did not fully complete it. **These figures indicate strong engagement overall, with nearly three-quarters of participants completing at least 50% of the program.**

By way of comparison, national data for 2024-2025 shows that 59% of all alcohol and other drug treatment episodes end in a planned completion (AIHW, 2025a). Catalyst's 54% full-program completion is a strong result for an intensive multi-week program, where completion is typically harder to sustain than in the brief and single-session interventions that make up much of the national figure. The program's cost of \$9,531 per participant also compares favourably with the broader sector - a recent Australian study estimated average drug treatment costs of \$10,540 per person per year across residential rehabilitation, counselling and detoxification services (Tran et al., 2025).

Table 2: Basic program information

Item	Value
Program cost	\$457,506
Program participants	48
Cost per participant	\$9,531
# of participants who fully completed program	26
% of participants who fully completed program	54%
# of participants who partially completed (≥50%) but did not finish	9
% of participants who partially completed (≥50%) but did not finish	19%

3.1.2 Program outcomes

Across multiple validated tools, participants demonstrated substantial improvements in psychological distress, self-efficacy, substance use, quality of life, and relational wellbeing. Results are drawn from Catalyst Tasmania (2025) and other Catalyst programs (2020). See Appendix 2 for further detail on where data was drawn from.

Overall Summary

Across all tools, the data show a consistent pattern of improvement:

- Strong reductions in psychological distress (K10, K5)
- Increased self-efficacy and control (BSCQ-8)
- Reduced dependence (SDS)
- Improved quality of life (WHOQoL-8)
- Better self-perception and relationship satisfaction (TOM)
- Reduced substance use (ATOP)

Figure 3 summarises the share of participants who improved on each validated measure. Table 3 presents these results in further detail. These outcomes provide a robust evidence base for the economic modelling and support the program's estimated impact on relapse risk, stability, and long-term wellbeing.

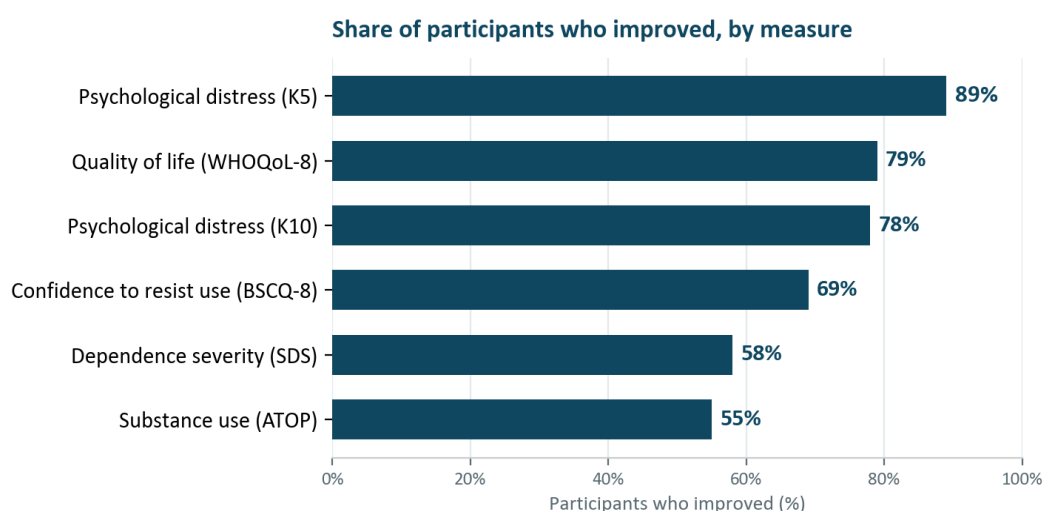


Figure 3. Share of participants who improved on each validated measure. Source: Catalyst Tasmania (2025) for K5, K10 and BSCQ-8; earlier Catalyst programs (2020) for WHOQoL-8, SDS and ATOP.

Table 3. Summary of results across outcome measures

Outcome measure	Results summary
Self-Efficacy and Control (BSCQ-8)	Participants showed meaningful gains in confidence and control over substance use situations: • Average score increased from 60% to 73%. • 69% improved their score, 10% showed no change, and 21% worsened. These results indicate a strong shift toward improved coping and self-management.

Outcome measure	Results summary
Psychological Distress (K10 and K5)	K10 (Tasmania 2025) 78% improved, 22% worsened K10 Distress Levels (Other Catalyst Programs 2020) - Low distress: increased from 21% to 47% - Very high distress: reduced from 47% to 13% - Moderate and high distress categories remained relatively stable This represents a major shift away from very high distress toward lower-severity categories. K5 (Tasmania 2025) 89% improved, 11% worsened
Dependence Severity (SDS)	Participants showed reductions in dependence, with 58% decreasing their SDS score, 19% increasing, and 19% showing no change. This aligns with reductions in substance use and improved stability.
Quality of Life (WHOQoL-8)	Participants reported broad improvements in overall quality of life, with 79% increasing their score, 12% decreasing, and 9% showing no change. These improvements reflect gains across physical, psychological, social, and environmental domains.
Self-Perception and Relationships (TOM)	Participants reported improvements in self-perception and relationship satisfaction: - Perceptions of Self: <i>Very satisfied</i>: increased from 1 to 3, <i>Satisfied</i>: 9 to 21, <i>Unsatisfied/very unsatisfied</i>: 27 to 5 - Relationship Satisfaction: <i>Very satisfied or satisfied</i>: 12 to 25, <i>Unsatisfied or very unsatisfied</i>: 21 to 11 These shifts indicate improved self-esteem, confidence, and relational functioning.
Substance Use (ATOP-Modified)	Participants demonstrated reductions in substance use, with 55% reducing or ceasing their primary substance use. This aligns with improvements in dependence, self-efficacy, and psychological distress.

3.2 What are the social and economic benefits of the Catalyst Program?

A wide body of Australian and international research shows that alcohol and other drug (AOD) post-withdrawal stabilisation and continuing support programs generate benefits that extend well beyond

individual participants (Teesson et al., 2008; Manning et al., 2017; McKay, 2021; Whetton et al., 2016). These programs typically produce improvements across health, social, economic, and community domains, reflecting the complex ways AOD use affects families, workplaces, service systems, and the broader community.

While the economic evaluation for Catalyst monetises only those impacts that are measurable and material within the five-year horizon, the broader literature indicates a much wider set of potential benefits. These benefits provide important context for understanding the full social value that programs like Catalyst may contribute to, even where impacts are not directly monetised in the CBA.

Table 4 below summarises the six key beneficiary groups and the types of benefits commonly associated with AOD post-withdrawal programs, providing a high-level map of Catalyst’s potential broader impact. A full breakdown of these is provided in Appendix 3.

Table 4: High-level benefit map

Beneficiary	Benefits
Government	Reduced demand on health, justice, homelessness and welfare systems; increased tax revenue; avoided morbidity and mortality costs.
Participants	Improved mental health and wellbeing; greater stability and safety; increased capacity to work or study; enhanced self-efficacy and quality of life; reduced spending on substances; reduced out-of-pocket health costs; fewer crisis-related personal losses.
Families and Children	Safer and more stable home environments; improved parenting capacity; reduced intergenerational harm; strengthened relationships; reduced crisis-driven financial strain; fewer missed school days.
Employers and Workplaces	Higher productivity and reliability; improved workplace safety; lower turnover and recruitment costs.
Local Community	Improved community safety; better public amenity; stronger social cohesion.
Community Services and NGOs	Reduced crisis churn; more effective engagement with supports; freed-up capacity for prevention and long-term support.

From these, only benefits that were **monetisable**, **material**, and **supported by strong evidence** were included in the CBA. Appendix 4 presents the assessment of each benefit for the six groups identified in Table 4 above. The summary of benefits included in the CBA following this process are presented in Table 5 below for **government, participants, and employers and workplaces**. This reflects the primary beneficiary groups, but also a conservative view of the overall benefits that can result from the program.

Table 5. Summary of benefits included in the CBA

Government	Participants	Employers and Workplaces
• Reduced health system presentations • Reduced crime and justice involvement • Reduced homelessness and housing instability • Increased tax contributions and reduced Centrelink dependence • Reduced morbidity and mortality	• Improved wellbeing • Increased net earnings • Reduced substance expenditure	• Avoided absenteeism • Avoided job replacement

3.3 Economic Evaluation Results

The Catalyst Program delivers **\$3.14 in benefits for every \$1 invested**, generating a **net gain of \$977,000** over five years. Benefits accrue across government, participants, and employers, with the largest value arising from:

- Reduced morbidity and mortality
- Improved participant wellbeing
- Increased employment and earnings
- Reduced reliance on health, justice, and homelessness systems

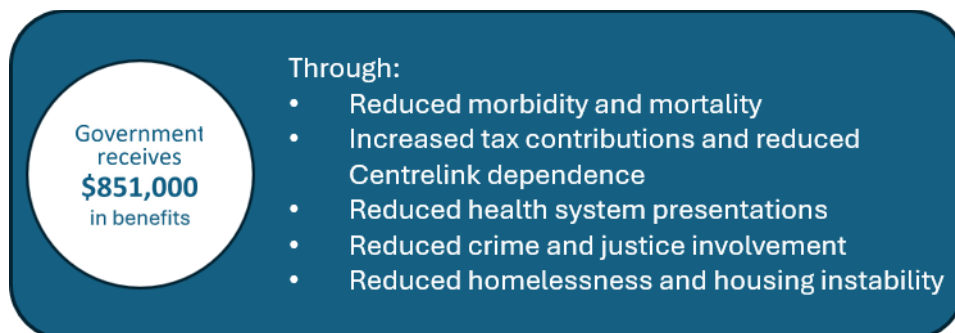
While the CBA looks at value for investment from a whole-of-society perspective, it is helpful to understand how much the investment in the program could financially benefit from a government spending perspective. Financially, the 2025 program cost \$457,506. The financial benefits back to the government exceed this, returning an estimated \$851,000 back to the public purse. This means that **for every \$1 invested returns \$1.88 in avoided government expenditure.**

Table 6: Catalyst Tasmania CBA summary results (real \$2025, discounted 7%)

Costs	\$457,506
Program expenditure	\$457,506
Benefits*	\$1,435,000
Government	\$851,000
Reduced morbidity and mortality	\$567,000
Increased income tax contributions and reduced Centrelink dependence	\$138,000
Reduced presentations to the health system	\$77,000
Reduced crime and justice system involvement	\$48,000
Reduced homelessness and housing instability	\$22,000
Participants	\$550,000
Improved wellbeing (relief from depression/anxiety)	\$244,000
Increased net earnings from improved work capacity	\$239,000
Reduced substance expenditure	\$67,000
Employers and workplaces	\$34,000
Avoided absenteeism	\$21,000
Avoided job replacement	\$13,000
Results	
Net Present Value (NPV)	\$977,000
Benefit Cost Ratio (BCR)	3.14

* Benefit values have been rounded to the nearest thousand.

3.3.1 Benefits to Government



The breakdown is as follows:

- **Reduced morbidity and mortality (\$567,000).** High-risk AOD use is associated with elevated rates of premature mortality and serious non-fatal health events. Studies show around 11 to 26 deaths per 1,000 person-years among people with severe methamphetamine or alcohol use (Stockings et al., 2019; Leung et al., 2023), and around 18% experience at least one serious non-fatal event annually (AIHW, 2025b). Based on these rates and the program's observed reductions in high-risk use and psychological distress, we have made conservative estimates on Catalyst's influence on the reduction in the likelihood of premature death and serious morbidity events⁷. This is the largest benefit across the CBA.
- **Increased tax contributions and reduced Centrelink dependence (\$138,000).** Stabilisation improves work capacity and employment outcomes. Longitudinal studies show a substantial share of high-risk AOD users return to work as their substance use stabilises (Laudet, 2012; Tran et al., 2025). This results in increased tax revenue and reduced reliance on income support (around 90% of people who regularly use drugs rely on a government payment; Sutherland et al., 2023). These fiscal benefits are well-established in the literature (Teesson et al., 2008; Manning et al., 2017) and represent the second-largest government benefit.
- **Reduced health system presentations (\$77,000).** High-risk AOD use drives frequent ambulance callouts, ED presentations, and hospital admissions (Kelly, McKetin & McLaren, 2005). Evidence shows that 13-16% of ED presentations are alcohol related in Australia and New Zealand, with 2-3% specifically methamphetamine related (Australasian College for Emergency Medicine 2020). Drawing on these rates and Catalyst's reductions in psychological distress and substance use, we have estimated reductions in the frequency and severity of crisis episodes, leading to avoided ambulance, ED, short-stay, long-stay, and ICU costs.
- **Reduced crime and justice involvement (\$48,000).** AOD use is a major driver of police contact, court matters, and custody episodes. National data show around 24% of people who regularly use methamphetamine were arrested in the past year (NDARC, 2024); most proceedings that reach the courts result in a finding of guilt (ABS, 2025a), and around 11% of those found guilty receive a custodial sentence (ABS, 2025b). Using these baseline rates and Catalyst's improvements in stability and wellbeing, we estimate that the program reduces

⁷ These health benefits are valued using the value of statistical life (VSL) and the value of a statistical life year (VSLY) - standard figures government uses to value avoiding a premature death or a year of serious ill-health. This is a societal value, not a cash saving to government.

crime and justice system costs by \$48,000 through a reduction in the likelihood of police incidents, court matters, and custody days.

- **Reduced homelessness and housing instability (\$22,000).** AOD use and homelessness are closely linked. Studies show around 19% of high-risk AOD users experience homelessness annually (Topp et al., 2013) with many requiring Specialist Homelessness Services (SHS) support or crisis accommodation (AIHW, 2023c). Based on these rates and Catalyst’s improvements in psychological distress, self-efficacy, and substance use, we estimate that the program reduces homelessness and housing instability costs by \$22,000, including SHS support periods, crisis accommodation nights, and tenancy failures.

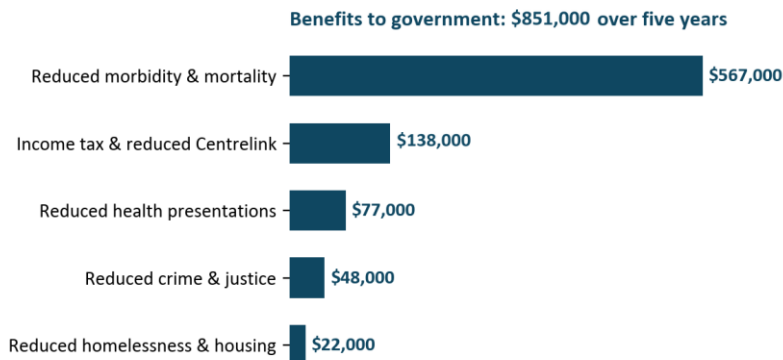
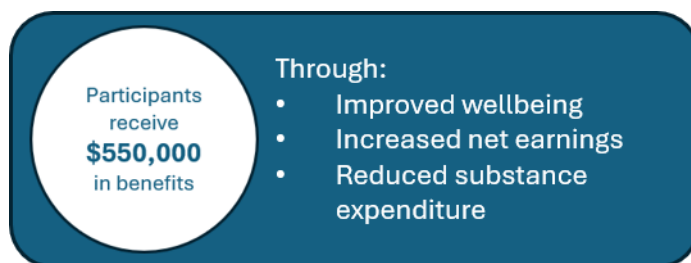


Figure 4. Benefits to government by component over five years (real \$2025).

3.3.2 Benefits to participants



The breakdown is as follows:

- **Improved wellbeing (\$244,000).** Psychological distress is highly prevalent among people with high-risk AOD use (AIHW, 2023a). Catalyst’s program data show:
 - 78% of participants improved K10
 - 89% improved K5
 - 69% improved BSCQ-8

These improvements align with evidence that structured psychosocial support and continuing care reduce distress and improve functioning (Blodgett et al., 2014; Manning et al., 2019; McKay, 2021). Using these outcomes and a conservative ASVB partial-relief proxy, we estimate that the program generates \$244,000 in benefits for participants. **The wellbeing valuation represents an estimate of social value, not a financial return or payment. It reflects improvements in quality of life rather than direct fiscal or income gains.**

- **Increased net earnings (\$239,000).** AOD stabilisation improves cognitive functioning, routine, reliability, and capacity to sustain employment. Studies show a substantial share of high-risk AOD users return to work as their substance use stabilises (Laudet, 2012; Tran et al., 2025). Drawing on this evidence and Catalyst’s improvements in wellbeing and selfefficacy, we estimate that the program increases employment and earnings for participants to a value of \$239,000.
- **Reduced substance expenditure (\$67,000).** Dependent users typically spend around \$160 per week on substances (Whetton et al., 2016). Catalyst’s program data show 55% of participants reduce or cease their primary substance use. Using these data, we estimate based on our modelling that the program reduces participants’ substance-related spending, generating direct financial savings of \$67,000.

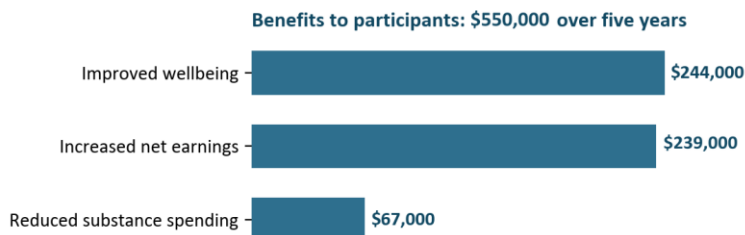


Figure 5. Benefits to participants by component over five years (real \$2025).

3.3.3 Benefits to Employers and Workplaces



The breakdown is as follows:

- **Avoided absenteeism (\$21,000).** AOD use is associated with increased absenteeism and reduced productivity. Workplace studies show high-risk AOD users are several times more likely to be absent from work than other employees (Roche et al., 2016; Marzan et al., 2023). Using this evidence and Catalyst’s improvements in wellbeing and substance use, we estimate that the program reduces AOD-related absenteeism costs by \$21,000 among employed participants.
- **Avoided job replacement (\$13,000).** AOD instability increases the likelihood of job loss, and replacing staff typically costs 20-30% of annual salary (Boushey & Glynn, 2012). Australian data show high unemployment among people who use methamphetamine (18% of crystal methamphetamine users are unemployed and looking for work; Goldsmid et al., 2017), and stabilisation supports employment retention. Based on these findings and Catalyst’s improvements in stability and functioning, we estimate the reductions in job loss among employed participants, generating avoided recruitment and onboarding costs of \$13,000.



Figure 6. Benefits to employers and workplaces by component over five years (real \$2025).

3.3.4 Sensitivity analysis

Sensitivity analysis was conducted to assess variations in the assumptions made in the model. Results of the sensitivity analysis are provided below in Table 7. The results show that even under rigorous testing, the Catalyst Tasmania program delivers a positive return on investment.

Table 7. Cost benefit analysis – sensitivity test results

Sensitivity test	Measure	Results
Discount rate of 4%	NPV	\$1,066,000
	BCR	3.33
Discount rate of 10%	NPV	\$894,000
	BCR	2.95
Benefits +20%	NPV	\$1,264,000
	BCR	3.76
Benefits -20%	NPV	\$690,000
	BCR	2.51
Benefits -50%	NPV	\$260,000
	BCR	1.57
Evidence-anchored relapse parameters (Appendix 1)	NPV	\$174,000
	BCR	1.38

4 Conclusion

The Catalyst Program delivers strong economic and social value, returning more than **three times** its cost and generating a **net benefit of \$977,000** over five years.

The program:

- reduces pressure on health, justice, and homelessness systems
- improves participant wellbeing and economic participation
- supports employers through reduced absenteeism and turnover
- prevents costly morbidity and mortality events

When interpreting the results of this cost–benefit analysis, it is useful to consider how Catalyst’s economic performance compares with other alcohol and other drug (AOD) interventions. The fiveyear benefit-cost ratio (BCR) for Catalyst is 3.14.

National evidence, including the Australian Institute of Criminology’s review of drug demand reduction programs, shows that effective treatment programs reliably return more than they cost, with the programs most similar to Catalyst returning around \$2.70 to \$3.25 for every dollar invested (Voce & Sullivan, 2022). These evaluations generally include a mix of fiscal, participant, employer, and community benefits, reflecting the broad social and economic impacts associated with stabilisation and recovery.

Catalyst therefore represents a strong and credible economic return, particularly given the conservative assumptions applied in this analysis.

5 References

- Alliance Social Enterprises. (n.d.). *Australian Social Value Bank*. <https://asvb.com.au/asvb-helps-measure-social-impact/what-is-the-asvb/>
- Athavale V, Green C, Lim KZ, Wong C, Tiruvoipati R. (2017). Characteristics and outcomes of patients with drug overdose requiring admission to Intensive Care Unit. *Australasian Psychiatry*, 25(5), 489-493. <https://doi.org/10.1177/1039856217706824>
- Australasian College for Emergency Medicine. (2020). *2019 alcohol and other drug harm snapshot survey*. https://acem.org.au/getmedia/f7bec2c4-6573-471f-8cf4-f9a0bc466506/Alcohol-Snapshot-Report_R6
- Australian Bureau of Statistics. (2022). *Housing: Census of Population and Housing, 2021*. ABS. <https://www.abs.gov.au/statistics/people/housing/housing-census/latest-release>
- Australian Bureau of Statistics. (2025a). *Recorded crime — offenders, 2024–25*. ABS. <https://www.abs.gov.au/statistics/people/crime-and-justice/recorded-crime-offenders/latest-release>
- Australian Bureau of Statistics. (2025b). *Criminal courts, Australia, 2024–25*. ABS. <https://www.abs.gov.au/statistics/people/crime-and-justice/criminal-courts-australia/latest-release>
- Australian Institute of Criminology (AIC). (2020). *Drug use monitoring in Australia: Drug use among police detainees, 2019* (Statistical Report No. 30). <https://www.aic.gov.au/publications/sr/sr30>
- Australian Institute of Health and Welfare (AIHW). (2023a). *Alcohol and other drug treatment services in Australia*. <https://www.aihw.gov.au/reports/alcohol-other-drug-treatment-services/alcohol-other-drug-treatment-services-australia/>
- Australian Institute of Health and Welfare (AIHW). (2023c). *Specialist homelessness services annual report*. <https://www.aihw.gov.au/reports/homelessness-services/shs-annual-report-22-23>
- Australian Institute of Health and Welfare (AIHW). (2025a). *Alcohol and other drug treatment services in Australia annual report 2024–25*. AIHW. <https://www.aihw.gov.au/reports/alcohol-other-drug-treatment-services/alcohol-other-drug-treatment-services-australia/>
- Australian Institute of Health and Welfare (AIHW). (2025b). *Alcohol, tobacco & other drugs in Australia: Amphetamines and other stimulants* [Web report]. AIHW. <https://www.aihw.gov.au/reports/alcohol/alcohol-tobacco-other-drugs-australia/contents/drug-types/amphetamines-and-other-stimulants>
- Australian Taxation Office. (2025). *Tax rates — Australian resident (2024–25 income year)*. Australian Government. <https://www.ato.gov.au/tax-rates-and-codes/tax-rates-australian-residents>
- Blodgett, J. C., Maisel, N. C., Fuh, I. L., Wilbourne, P. L., & Finney, J. W. (2014). How effective is continuing care for substance use disorders? A meta-analytic review. *Journal of Substance Abuse Treatment*, 46(2), 87–97. <https://doi.org/10.1016/j.jsat.2013.08.022>
- Boushey, H., & Glynn, S. J. (2012). *There are significant business costs to replacing employees*. Center for American Progress. <https://www.americanprogress.org/article/there-are-significant-business-costs-to-replacing-employees/>

- Brecht, M.-L., & Herbeck, D. (2014). Time to relapse following treatment for methamphetamine use: A long-term perspective on patterns and predictors. *Drug and Alcohol Dependence*, 139, 18–25. <https://doi.org/10.1016/j.drugalcdep.2014.02.702>
- Carrandi, A., Liew, C., Maiden, M. J., Litton, E., Taylor, C., Thompson, K., & Higgins, A. (2024). Costs of Australian intensive care: A systematic review. *Critical Care and Resuscitation*, 26(2), 153-158. <https://doi.org/10.1016/j.ccrj.2024.03.003>
- Chan, R., Karlsson, A., Price, O., Gibbs, D., Uporova, J., & Peacock, A. (2021). *New South Wales drug trends 2020: Key findings from the Illicit Drug Reporting System (IDRS) interviews*. https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/IDRS_NSW_Report_FINAL.pdf
- Dawe, S., Frye, S., Best, D., Moss, D., Atkinson, J., Evans, C., et al. (2007). *Drug use in the family: Impacts and implications for children* (ANCD Research Paper No. 13). Australian National Council on Drugs. <https://apo.org.au/sites/default/files/resource-files/2007-06/apo-nid7330.pdf>
- Donnelly, N. (2025). *Trends in police legal action rates in New South Wales: 2009 to 2023* (Bureau Brief No. 175). NSW Bureau of Crime Statistics and Research. <https://bocsar.nsw.gov.au/documents/publications/bb/bb151-200/BB175-Report-trends-in-police-legal-action-rates-nsw.pdf>
- Eddie, D., Vilsaint, C. L., Hoffman, L. A., Bergman, B. G., Kelly, J. F., & Hoepfner, B. B. (2020). From working on recovery to working in recovery: Employment status among a nationally representative U.S. sample of individuals who have resolved a significant alcohol or other drug problem. *Journal of Substance Abuse Treatment*, 113, 108000. <https://doi.org/10.1016/j.jsat.2020.108000>
- Goldsmid, S., Johnston, I., Kapira, M., Claydon, C., Petricevic, M., & Webber, K. (2017). *Australian methamphetamine user outcomes* (Statistical Bulletin No. 3). Australian Institute of Criminology. <https://www.aic.gov.au/publications/sb/sb3>
- Goldsmid, S., & Willis, M. (2016). *Methamphetamine use and acquisitive crime: Evidence of a relationship* (Trends & Issues in Crime and Criminal Justice No. 516). Australian Institute of Criminology. <https://doi.org/10.52922/ti149987>
- Hall, C., Cameron Krepp, S., Eddy, S., Aitken, C., Scott, D., & Dietze, P. (2021). *Victorian drug trends 2020: Key findings from the Illicit Drug Reporting System (IDRS) interviews*. https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/VIC_IDRS_Report_FINAL.pdf
- Hicks P, Huckson S, Fenney E, Leggett I, Pilcher D, Litton E. (2019). The financial cost of intensive care in Australia: a multicentre registry study. *Medical Journal of Australia*, 211(7), 324–325. <https://doi.org/10.5694/mja2.50309>
- Independent Health and Aged Care Pricing Authority (IHACPA). (2023). *National Hospital Cost Data Collection report, public sector, Round 25 (2020–21)*. IHACPA. <https://www.ihacpa.gov.au/resources/national-hospital-cost-data-collection-nhcpc-public-sector-report-2020-21>
- Johnson, G., & Chamberlain, C. (2008). Homelessness and substance abuse: Which comes first? *Australian Social Work*, 61(4), 342–356. <https://doi.org/10.1080/03124070802428191>
- Kadden, R. M., & Litt, M. D. (2011). The role of self-efficacy in the treatment of substance use disorders. *Addictive Behaviors*, 36(12), 1120–1126. <https://doi.org/10.1016/j.addbeh.2011.07.032>

- Kelley, M. L., Lawrence, H. R., Millettich, R. J., Hollis, B. F., & Henson, J. M. (2015). Modeling risk for child abuse and harsh parenting in families with depressed and substance-abusing parents. *Child Abuse & Neglect*, 43, 42–52. <https://doi.org/10.1016/j.chiabu.2015.01.017>
- Kelly, E., McKetin, R., & McLaren, J. (2005). *Health service utilisation among regular methamphetamine users* (NDARC Technical Report No. 233). National Drug and Alcohol Research Centre, UNSW. <https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/TR.233.pdf>
- Lanyon, C., Nambiar, D., Higgs, P., Dietze, P., & Quinn, B. (2019). Five-year changes in methamphetamine use, dependence, and remission in a community-recruited cohort. *Journal of Addiction Medicine*, 13(2), 159–165. <https://doi.org/10.1097/ADM.0000000000000469>
- Laudet, A. B. (2012). Rate and predictors of employment among formerly polysubstance dependent urban individuals in recovery. *Journal of Addictive Diseases*, 31(3), 288–302. <https://doi.org/10.1080/10550887.2012.694604>
- Leung, J., Chiu, V., Man, N., Yuen, W. S., Dobbins, T., Dunlop, A., ... Peacock, A. (2023). All-cause and cause-specific mortality in individuals with an alcohol-related emergency or hospital inpatient presentation. *Addiction*, 118(9), 1751–1762. <https://doi.org/10.1111/add.16218>
- Lintzeris, N., Deacon, R. M., Shanahan, M., Clarke, J., MacFarlane, S., Leung, S., Schulz, M., Jackson, A., Khamoudes, D., Gordon, D. E. A., & Demirkol, A. (2020). Evaluation of an assertive management and integrated care service for frequent emergency department attenders with substance use disorders: The IMPACT Project. *International Journal of Integrated Care*, 20(2), 6. <https://doi.org/10.5334/ijic.5343>
- Lowthian, E. (2022). The secondary harms of parental substance use on children's educational outcomes: A review. *Journal of Child & Adolescent Trauma*, 15(3), 511–522. <https://doi.org/10.1007/s40653-021-00433-2>
- Manning, V., Garfield, J. B. B., Best, D., Berends, L., Room, R., Mugavin, J., Larner, A., Lam, T., Buykx, P., Allsop, S., & Lubman, D. I. (2017). Substance use outcomes following treatment: Findings from the Australian Patient Pathways Study. *Australian and New Zealand Journal of Psychiatry*, 51(2), 177–189. <https://doi.org/10.1177/0004867415625815>
- Manning, V., Garfield, J. B. B., Lam, T., Allsop, S., Berends, L., Best, D., Buykx, P., Room, R., & Lubman, D. I. (2019). Improved quality of life following addiction treatment is associated with reductions in substance use. *Journal of Clinical Medicine*, 8(9), 1407. <https://doi.org/10.3390/jcm8091407>
- Marzan, M., Callinan, S., Livingston, M. & Jiang, H. (2023). The dose–response relationship between alcohol consumption and workplace absenteeism in Australia. *Drug and Alcohol Review*, 42(5), 1290–1300. <https://doi.org/10.1111/dar.13726>
- McKay, J. R. (2021). Impact of continuing care on recovery from substance use disorder. *Alcohol Research: Current Reviews*, 41(1), 01. <https://doi.org/10.35946/arcr.v41.1.01>
- McKetin, R., Degenhardt, L., Shanahan, M., Baker, A. L., Lee, N. K., & Lubman, D. I. (2018). Health service utilisation attributable to methamphetamine use in Australia: Patterns, predictors and national impact. *Drug and Alcohol Review*, 37(2), 196–204. <https://doi.org/10.1111/dar.12518>
- National Drug and Alcohol Research Centre. (2024). *Australian drug trends 2024: Key findings from the National Illicit Drug Reporting System (IDRS) interviews*. NDARC, UNSW.

<https://www.unsw.edu.au/research/ndarc/resources/australian-drug-trends-2024-key-findings-from-the-idrs>

Nolte-Troha, C., Roser, P., Henkel, D., Scherbaum, N., Koller, G., & Franke, A. G. (2023). Unemployment and substance use: An updated review of studies from North America and Europe. *Healthcare*, 11(8), 1182. <https://doi.org/10.3390/healthcare11081182>.

O'Farrell, T. J., & Clements, K. (2012). Review of outcome research on marital and family therapy in treatment for alcoholism. *Journal of Marital and Family Therapy*, 38(1), 122–144. <https://onlinelibrary.wiley.com/doi/10.1111/j.1752-0606.2011.00242.x>.

Office of Impact Analysis. (2023). *Value of statistical life* (Guidance note). Department of the Prime Minister and Cabinet. <https://oia.pmc.gov.au/sites/default/files/2023-10/value-of-statistical-life.pdf>

Pennay, A., Manton, E., Savic, M., Livingston, M., Matthews, S., & Lloyd, B. (2014). *Prohibiting public drinking in an urban area: Determining the impacts on police, the community and marginalised groups* (NDLERF Monograph No. 49). Australian Institute of Criminology. <https://www.aic.gov.au/publications/ndlerfmonograph/ndlerfmonograph49>

Pidd, K., Roche, A., & Duraisingam, V. (2019). Drug use and workplace safety: Issues and good practice responses. In R. J. Burke & A. M. Richardsen (Eds.), *Increasing occupational health and safety in workplaces* (pp. 69–92). Edward Elgar. <https://doi.org/10.4337/9781788118095.00012>

Productivity Commission. (2023). *Report on Government Services 2023, Part C — Justice*. <https://www.pc.gov.au/ongoing/report-on-government-services/2023/justice>

Productivity Commission. (2024). *Report on Government Services 2024, Part E — Health, Section 10: Primary and community health*. <https://www.pc.gov.au/ongoing/report-on-government-services/2024/health/primary-and-community-health>

Productivity Commission. (2026a). Report on Government Services 2026, Part E, Section 11: Ambulance services. <https://www.pc.gov.au/ongoing/report-on-government-services/health/ambulance-services>

Productivity Commission. (2026b). Report on Government Services 2026, Part G: Homelessness services. <https://www.pc.gov.au/ongoing/report-on-government-services/housing/homelessness/homelessness-services>

Rehm, J., Gmel, G. E., Sr., Gmel, G., Hasan, O. S. M., Imtiaz, S., Popova, S., Probst, C., Roerecke, M., Room, R., Samokhvalov, A. V., Shield, K. D., & Shuper, P. A. (2017). The relationship between different dimensions of alcohol use and the burden of disease—an update. *Addiction*, 112(6), 968–1001. <https://doi.org/10.1111/add.13757>

Ritter, A., Berends, L., & Chalmers, J. (2014). *New Horizons: The review of alcohol and other drug treatment services in Australia. Final report*. Drug Policy Modelling Program, National Drug and Alcohol Research Centre, UNSW Australia. <https://archive-ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/New%20Horizons%20Final%20Report%20July%202014.pdf>

Roche, A., Pidd, K., & Kostadinov, V. (2016). Alcohol- and drug-related absenteeism: A costly problem. *Australian and New Zealand Journal of Public Health*, 40(3), 236–238. <https://doi.org/10.1111/1753-6405.12414>

- Services Australia. (2025). *How much JobSeeker Payment you can get*. Australian Government. <https://www.servicesaustralia.gov.au/how-much-jobseeker-payment-you-can-get>
- Stockings, E., Tran, L. T., Santo, T., Jr., Peacock, A., Larney, S., Santomauro, D., Farrell, M., & Degenhardt, L. (2019). Mortality among people with regular or problematic use of amphetamines: A systematic review and meta-analysis. *Addiction*, 114(10), 1738–1750. <https://doi.org/10.1111/add.14706>
- Sutherland, R., Uporova, J., King, C., Chandrasena, U., Karlsson, A., Jones, F., Gibbs, D., Price, O., Dietze, P., Lenton, S., Salom, C., Bruno, R., Wilson, J., Agramunt, S., Daly, C., Thomas, N., Radke, S., Stafford, L., Degenhardt, L., Farrell, M., & Peacock, A. (2023). *Australian drug trends 2023: Key findings from the National Illicit Drug Reporting System (IDRS) interviews*. National Drug and Alcohol Research Centre, UNSW Sydney. <https://ndarc.med.unsw.edu.au/resource/australian-drug-trends-2023-key-findings-national-illicit-drug-reporting-system-idrs>
- Suto, D. J., Xiao, J., Bellinghausen, A. L., Odish, M., Sweeney, D. A., Wardi, G., & Owens, R. L. (2024). Temporal trends in methamphetamine use in patients admitted to the hospital: A retrospective cohort study. *Journal of Addiction Medicine*, 18(3), 339–341. <https://doi.org/10.1097/ADM.0000000000001294>
- Teesson, M., Mills, K., Ross, J., Darke, S., Williamson, A., & Havard, A. (2008). The impact of treatment on 3 years' outcome for heroin dependence: Findings from the Australian Treatment Outcome Study (ATOS). *Addiction*, 103(1), 80–88. <https://doi.org/10.1111/j.1360-0443.2007.02029.x>
- Thomas, N., Juckel, J., Daly, C., & Salom, C. (2021). *Queensland drug trends 2020: Key findings from the Illicit Drug Reporting System (IDRS) interviews*. https://ndarc.med.unsw.edu.au/sites/default/files/ndarc/resources/IDRS%20QLD%20Report_FINAL_update%20Nov%202021.pdf
- Topp, L., Iversen, J., Baldry, E., & Maher, L. (2013). Housing instability among people who inject drugs: Results from the Australian Needle and Syringe Program Survey. *Journal of Urban Health*, 90(4), 699–716. <https://doi.org/10.1007/s11524-012-9730-6>
- Tran, A. D., Chen, R., Sara, G., & McKetin, R. (2025). Health-care costs among people who use methamphetamine in Australia. *Drug and Alcohol Review*, 44(4), 1157–1168. <https://doi.org/10.1111/dar.14043>
- Vallesi, S., Wood, N., Wood, L., Cumming, C., Gazey, A., & Flatau, P. (2018). *50 Lives 50 Homes: A Housing First response to ending homelessness in Perth. Second evaluation report*. Centre for Social Impact, University of Western Australia. <https://assets.csi.edu.au/assets/research/50-Lives-50-Homes-Second-Evaluation-Report.pdf>
- Vigdal, M. I., Moltu, C., Bjørnstad, J., & Selseng, L. B. (2022). Social recovery in substance use disorder: A metasynthesis of qualitative studies. *Drug and Alcohol Review*, 41(4), 974–987. <https://doi.org/10.1111/dar.13434>
- Villamil-Sánchez, A. O., Scoppetta, D. G. D., Scott, J., Ortega, A., & Pérez-Gómez, A. (2026). Impact of drug and alcohol use on family, work, emotional and leisure time life. *Journal of Family Therapy*. <https://onlinelibrary.wiley.com/doi/10.1111/1467-6427.70024>

Voce, A., & Sullivan, T. (2022). *What are the monetary returns of investing in programs that reduce demand for illicit drugs?* (Trends & Issues in Crime and Criminal Justice No. 657). Australian Institute of Criminology. <https://doi.org/10.52922/ti78733>

Whetton, S., Shanahan, M., Cartwright, K., Duraisingam, V., Ferrante, A., Gray, D., Kaye, S., Kostadinov, V., McKetin, R., Pidd, K., Roche, A., Tait, R. J., & Allsop, S. (2016). *The social costs of methamphetamine in Australia 2013/14*. National Drug Research Institute, Curtin University. <https://ndri.curtin.edu.au/ndri/media/documents/publications/T246.pdf>

Whiteside, B., Dietze, P. M., Roxburgh, A., McKay, F. H., & Dunn, M. (2026). Defining public amenity and related concepts in the drug consumption room literature: A scoping review. *Drug and Alcohol Review*, 45(1), e70097. <https://doi.org/10.1111/dar.70097>

Appendix 1 The counterfactual - estimating relapse trajectories

A core component of the economic evaluation is the construction of a credible **counterfactual scenario** - an estimate of what would likely have occurred in the absence of the program. Establishing this counterfactual is essential for attributing economic value to the outcomes observed among participants.

Counterfactual scenario

For Catalyst, the counterfactual reflects the expected trajectory of people with high-risk alcohol and other drug (AOD) use who do not receive structured stabilisation or continuing-care support. Evidence from longitudinal studies shows that, without intervention, individuals with severe AOD use typically experience:

- high rates of **relapse** following withdrawal or short-term treatment
- ongoing **psychological distress**
- continued **substance use** at harmful levels
- elevated risk of **health, justice, and homelessness system contact**
- limited or unstable **employment**
- increased risk of **serious morbidity and premature mortality**

These patterns are well documented in Australian and international research (e.g. McKetin et al., 2018; Stockings et al., 2019; Rehm et al., 2017).

Relapse risk modelling

To quantify the counterfactual, we modelled the **probability of relapse within 12 months** for the cohort, drawing on substance-specific relapse rates reported in the literature. In the key methamphetamine cohort study, 61% of people relapsed within one year of treatment discharge (Brecht & Herbeck, 2014), and in the largest Australian treatment cohort 62.5% were not abstinent from their primary drug of concern at 12 months (Manning et al., 2017), with relapse risk varying by substance type and severity.

Because Catalyst does not yet have longitudinal follow-up data on relapse, relapse probabilities were derived from the program's observed outcome improvements and triangulated with published relapse rates for treatment-seeking cohorts following withdrawal.

Outcome data used to infer relapse likelihood

Catalyst collects validated measures at intake and exit, including:

- ATOP (substance use frequency and severity)
- SDS (dependence severity)
- K10/K5 (psychological distress)
- BSCQ-8 (situational confidence and relapse-prevention self-efficacy)
- WHOQoL-8 (quality of life)

Across these measures, participants showed substantial improvements, including:

- Reduced frequency and severity of substance use
- Reduced dependence
- Improved psychological wellbeing
- Increased confidence to avoid relapse
- Improved stability and functioning

These patterns are consistent with the types of improvements associated with lower relapse risk in the AOD literature (Blodgett et al., 2014; Manning et al., 2019; McKay, 2021).

The modelling followed a two-step process:

1. **Establishing a baseline relapse probability** Using evidence from published relapse studies (Brecht & Herbeck, 2014; Manning et al., 2017) and program outcome data, we derived a **weighted 12-month relapse probability** for the cohort based on their primary substances of concern. This produced a counterfactual relapse estimate of **approximately 71%**.
2. **Estimating relapse risk for program participants** Program outcome data showed substantial improvements in psychological distress (K10, K5), self-efficacy (BSCQ-8), and substance use (55% reduction or cessation). Using these improvements and evidence linking psychosocial gains to reduced relapse risk, we applied conservative relative risk reductions to estimate relapse probabilities for:
 - **completers** (42%)
 - **partial completers** (44%)

These program-group estimates are informed by Catalyst’s observed outcome improvements and are more favourable than the small pooled effects reported for structured continuing care alone (Blodgett et al., 2014); they are therefore treated as program-data-informed assumptions, and an evidence-anchored scenario (counterfactual relapse of 60–61% per published estimates, with a 20% relative risk reduction for completers and 15% for partial completers) is reported in the sensitivity analysis, yielding a five-year BCR of 1.38.

Why relapse modelling matters

Relapse risk is a key driver of downstream outcomes. Higher relapse rates are associated with:

- increased ambulance, ED, and hospital presentations
- higher likelihood of police incidents and custody episodes
- greater risk of homelessness and tenancy failure
- reduced employment stability
- elevated risk of serious morbidity and premature death

By comparing the counterfactual relapse trajectory with the modelled relapse trajectory for participants, we were able to estimate the **avoided events** across health, justice, homelessness, employment, and mortality domains. These avoided events form the basis of the monetised benefits included in the cost-benefit analysis.

Appendix 2 Catalyst Program Outcome Data

Table 8. Tools and use in different Catalyst Programs

Tool	Catalyst Tasmania	Other Catalyst Programs
Treatment Outcomes Measurement (TOM)		2019
Perceptions of Self		2020
Satisfaction in Relationships		
Severity of Dependence Scale (SDS)		2020
Psychological Distress Scale Kessler 10 (K10)	2024	2020
	2025	2024
		2025
World Health Organization Quality of Life-8 Scale (WHOQoL-8)		2020
Australian Treatment Outcome Profile - Modified (ATOP)	2024	2020
		2024
Substance Use Recovery Evaluator (SURE) survey		2023
Brief Situational Confidence Questionnaire (BSCQ-8)	2025	2025

Table 9. Catalyst tool results across Catalyst programs

Tool	Indicator	Results	Source
Brief Situational Confidence Questionnaire (BSCQ-8)	Average BSCQ-8 Score Pre and Post	Pre: 60% Post: 73%	Catalyst Tasmania 2025
	% of participants with improved, no change, worsened score	Improved: 69% No change: 10% Worsened: 21%	Catalyst Tasmania 2025
K10	% of participants with improved, no change, worsened score	Improved: 78% Worsened: 22%	Catalyst Tasmania 2025
	Pre and Post Program % of participants with level of distress = low, moderate, high, very high	Low: 21% to 47% Moderate: 15% to 21% High: 17% to 19% Very high: 47% to 13%	All other Catalyst programs, 2020
K5	% of participants with improved, no change, worsened score	Improved: 89% Worsened: 11%	Catalyst Tasmania 2025
Severity of Dependence Scale (SDS)	% of participants with increase, no change, decrease	Decrease: 58% Increase: 19% No change: 19%	All other Catalyst programs, 2020

Tool	Indicator	Results	Source
World Health Organization Quality of Life-8 Scale (WHOQoL-8)	% of participants with increase, no change, decrease	Increase: 79% Decrease: 12% No change: 9%	All other Catalyst programs, 2020
Treatment Outcomes Measurement (TOM) - Perceptions of Self	Pre and Post Program # of participants = very satisfied, satisfied, neither, unsatisfied, very unsatisfied	VS: 1 to 3 S: 9 to 21 N: 10 to 18 Un: 16 to 5 Vun: 11 to 0	All other Catalyst programs, 2020
Treatment Outcomes Measurement (TOM) - Satisfaction in Relationships	Pre and Post Program # of participants = very satisfied or satisfied, neither, unsatisfied or very unsatisfied	VS or S: 12 to 25 N: 14 to 11 Un or VUn: 21 to 11	All other Catalyst programs, 2020
Australian Treatment Outcome Profile - Modified (ATOP)	% participations with reduction or cessation in primary substance use	55%	All other Catalyst programs, 2020

Appendix 3 Benefit map and rapid evidence review summary

Table 10: Government benefit map and evidence summary

Benefit category	Plain description	Evidence summary
Avoided fiscal costs	Reduced health, justice, housing, productivity, morbidity and mortality costs.	Strong evidence that AOD treatment reduces ED, hospital, police, courts, corrections, and welfare costs (Ritter et al., 2014; AIHW, 2023a).

Table 11. Participant benefit map and evidence summary

Benefit category	Plain description	Evidence summary
Improved health & wellbeing	Reduced substance use, fewer high-risk episodes, improved mental health, better day-to-day functioning.	Continuing care reduces relapse, psychological distress, and crisis episodes (Manning et al., 2019; McKay, 2021). 70-80% of AOD clients show clinically meaningful mental health improvement (AIHW, 2023a).
Greater stability & safety	More stable routines, safer relationships, reduced exposure to violence or chaotic environments.	AOD stabilisation reduces exposure to violence, chaotic environments, and crisis-driven harm (Dawe et al., 2007).
Improved economic participation	Increased capacity to work or study, improved financial stability, reduced income volatility.	Employment improves 20-30% in early recovery (Eddie et al., 2020). Productivity gains well-documented (Roche et al., 2016).
Enhanced self-efficacy & quality of life	Increased confidence, sense of control, hope, and wellbeing.	Recovery improves self-efficacy, hope, and QoL (Kadden & Litt., 2011; McKay, 2021).

Benefit category	Plain description	Evidence summary
Reduced personal spending on substances	Lower weekly expenditure on alcohol or drugs as use decreases.	Dependent users spending ranges from \$50-\$75 for crystal methamphetamine in Victoria (Hall et al., 2021) and Queensland (Thomas et al., 2021), with the price of heroin reported at \$450 in NSW (Chan et al., 2021).
Reduced out-of-pocket health costs	Fewer GP/psychology gap fees due to reduced crisis-driven MH consults.	Continuing care models for substance use disorders yield modest to high improvements in long-term recovery and clinical outcomes (Blodgett et al., 2014; Manning et al., 2019), which ultimately drives down broader institutional healthcare utilisation costs (McKay, 2021).

Table 12. Families and children benefit map and evidence summary

Benefit category	Plain description	Evidence summary
Safer, more stable home environments	Reduced exposure to intoxication, conflict, and crisis situations.	Parental AOD treatment improves home stability and reduces child exposure to harm (Dawe et al., 2007).
Improved parenting capacity	More consistent routines, emotional availability, reduced risk of neglect.	Parenting capacity improves with reduced AOD use (Kelley et al., 2015).
Reduced intergenerational harm	Lower risk of behavioural, developmental, and later AOD issues in children.	Strong evidence of intergenerational AOD impacts (Kelley et al., 2015).
Strengthened relationships	Reconnection, trust rebuilding, reduced family breakdown.	Relationship improvements are consistent in recovery literature (O'Farrell & Clements, 2012; McKay, 2021).

Benefit category	Plain description	Evidence summary
Reduced crisis-driven financial strain	Fewer emergency childcare episodes, fewer disruptions to work.	Families experience work disruption due to AOD crises (Villamil-Sánchez et al., 2026).
Reduced child absenteeism	More stable routines reduce missed school days.	Parental AOD abuse actively disrupts school attendance patterns, whereas stable caregiving environments mitigate chronic absenteeism risk (Lowthian, 2022)

Table 13. Employers and workplaces benefit map and evidence summary

Benefit category	Plain description	Evidence summary
Higher productivity & reliability	Fewer absences, improved concentration, more consistent performance.	AOD treatment is associated with reduced substance use and improved functioning, addressing a problem that costs Australian workplaces over \$3 billion a year in absenteeism (Manning et al., 2019; Roche et al., 2016).
Improved workplace safety	Reduced impairment-related incidents.	Impairment increases workplace injury risk (Pidd et al., 2019).
Lower turnover & recruitment costs	Reduced churn due to stabilised recovery.	AOD instability increases job loss risk (Nolte-Troha et al., 2023); recruitment costs significant (Boushey & Glynn, 2012).

Table 14. Local community benefit map and evidence summary

Benefit category	Plain description	Evidence summary
Improved community safety	Lower rates of drug-related crime and antisocial behaviour.	AOD treatment reduces acquisitive crime (Goldsmid & Willis 2016).
Better public amenity	Reduced visible distress, homelessness, crisis-driven behaviour.	Public amenity improves with reduced street-level AOD harm (Pennay et al., 2014; Whiteside et al., 2026).
Stronger social cohesion	Increased participation in community life, volunteering, positive roles.	Recovery increases social participation (Vigdal et al., 2022).

Table 15. Community services and NGOs benefit map and evidence summary

Benefit category	Plain description	Evidence summary
Reduced crisis churn	Fewer disruptive crises requiring NGO emergency responses.	Crisis episodes reduce with stabilisation (Lintzeris et al., 2020).
More effective engagement with supports	More consistent attendance and use of services.	Engagement improves with continuing care (McKay, 2021).
Freed-up capacity	Services can redirect resources to prevention and long-term support.	System-level efficiency gains — potential only, not quantified (Productivity Commission, 2024).

Appendix 4 Assessment of benefit inclusion in CBA

Table 16. Assessment of benefit inclusion in CBA - Government

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Reduced presentations to the health system	Market-based cost offsets (ambulance, ED, hospital, ICU)	Yes	Yes	High incidence and high unit costs across ambulance, ED, short-stay, long-stay, and ICU. Included in CBA.
Reduced crime and justice system involvement	Market-based cost offsets (police, courts, custody)	Yes	Yes	Police incidents, court matters, and custody days have clear unit costs and non-trivial incidence. Included in CBA.
Reduced homelessness and housing instability	Market-based cost offsets (SHS support, crisis accommodation, tenancy failure)	Yes	Yes	SHS support periods, crisis accommodation nights, and tenancy failures have high unit costs and moderate incidence. Included in CBA.
Increased income tax contributions & reduced Centrelink dependence	Market-based fiscal impacts (tax revenue, reduced JobSeeker)	Yes	Yes	Increased employment generates tax revenue and reduces JobSeeker payments. Clear unit values and moderate incidence. Included in CBA.
Reduced morbidity and mortality	VSLY (serious morbidity) and VSL (premature death)	Yes	Yes	Serious morbidity and premature mortality have extremely high unit values. Even low incidence is material. Included in CBA.
Reduced child protection involvement	n/a	Partly	No	Conceptually relevant but incidence for this cohort is uncertain and likely low. Excluded from CBA.

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Reduced long-term welfare dependency	n/a	Partly	No (within horizon)	Effects occur beyond the 5-10 year horizon and are highly uncertain. Excluded from CBA.
Improved long-term productivity (human capital)	n/a	Partly	No (within horizon)	Productivity gains decades into the future are too uncertain to monetise. Excluded from CBA.
Reduced intergenerational service demand	n/a	No	No	Benefits to children occur over decades; outside scope. Excluded from CBA.

Table 17. Assessment of benefit inclusion in CBA - Participants

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Improved health & wellbeing	Wellbeing valuation (ASVB-style)	Yes (social value)	Yes	Mental health and functioning gains are large and central to outcomes. Valued using a partial-relief wellbeing proxy. Included in CBA.
Improved economic participation	Market valuation (net earnings)	Yes	Yes	Increased work capacity and employment are well evidenced and monetisable via net earnings. Included in CBA.
Reduced personal spending on substances	Direct financial savings	Yes	Yes	Weekly spend reductions are substantial for dependent users. Included in CBA.
Greater stability & safety	n/a	Mostly no	No	Real but diffuse; monetisable components (e.g., victimisation) are rare and small. Excluded from CBA.

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Enhanced self-efficacy & quality of life	n/a	No (separately)	Yes (within wellbeing)	Captured within the wellbeing proxy; not monetised separately.
Reduced out-of-pocket health costs	n/a	Yes (small)	No	Small and not material at cohort level. Excluded from CBA.
Avoided personal losses during crises	n/a	Yes (small)	No	Low incidence and low per-participant value. Excluded from CBA.

Table 18. Assessment of benefit inclusion in CBA - Employers and workplaces

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Higher productivity & reliability (avoided absenteeism)	Market valuation (productivity/absenteeism)	Yes	Yes	Avoided absenteeism is well evidenced and monetisable. Included in CBA.
Lower turnover & recruitment costs	Market valuation (recruitment/onboarding)	Yes	Yes	Avoided turnover has clear unit costs; small but meaningful. Included in CBA.
Improved workplace safety	n/a	Partly	No	Incidence among this cohort is low; monetised value would be very small. Excluded from CBA.

Table 19. Assessment of benefit inclusion in CBA – Community services and NGOs

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Reduced crisis churn	n/a	Yes	No	Avoided crisis responses have clear unit costs but small aggregate value. Excluded from CBA.
More effective engagement with supports	n/a	Yes (small)	No	Avoided missed appointments have measurable unit costs but low materiality. Excluded from CBA.
Freed-up capacity	n/a	Partly	No	Diffuse and difficult to attribute. Excluded from CBA.

Table 20. Assessment of benefit inclusion in CBA - Families and children

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Safer, more stable home environments	n/a	Mostly no	No	High social value but monetisable components are rare and small. Excluded from CBA.
Improved parenting capacity	n/a	Mostly no	No	Strong evidence but difficult to price cleanly. Excluded from CBA.
Reduced intergenerational harm	n/a	No	No	Occurs over decades; outside horizon. Excluded from CBA.
Strengthened relationships	n/a	No	No	Important but non-market and not suited to monetisation. Excluded from CBA.

Benefit	Type of valuation	Monetisable?	Material?	Reasoning
Reduced crisis-driven financial strain	n/a	Yes (small)	No	Infrequent and low value. Excluded from CBA.
Reduced child absenteeism	n/a	Yes (very small)	No	Very low unit value; negligible effect. Excluded from CBA.

Appendix 5 Model inputs

Government

Table 21. Model inputs: Government - health system presentations

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
Ambulance attendance	0.45	20-40% of treatment-seeking methamphetamine and heavy alcohol users have ≥ 1 ambulance attendance annually, and among those users the average number of attendances is 1.3-1.6 per year (McKetin et al., 2018).	\$800	Tran et al. (2025) costed an ambulance attendance at \$777.4, while national ambulance expenditure divided by incidents is estimated at \$1,400 (Productivity Commission, 2026a). Rounded to \$800 as a conservative estimate.	The model uses midpoint values of 30% and 1.5 attendances, giving $0.30 \times 1.5 = 0.45$ events per person per year.
Emergency department presentation	0.70	30-50% of treatment-seeking methamphetamine and alcohol users have ≥ 1 ED presentation annually, and among those users the average number of presentations is 1.4 - 2.0 per year (McKetin et al., 2018). Two-stage midpoint estimate: $0.40 \times 1.75 = 0.70$.	\$750	Cost to government per ED presentation. Falls between Tran et al. (2025) benchmarks of \$443 (non-overnight) and \$956 (overnight); consistent with the NHCDC national average of \$789 (2020–21; IHACPA 2023).	The model uses midpoint values of 40% and 1.75, giving $0.40 \times 1.75 = 0.70$ events per person per year.

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
Short hospital admission	0.20	22% had ≥ 1 general hospital admission in the past year; mean 0.41/person-year, all types (McKetin et al. 2018). Modelled total admissions (0.26/PY) is conservative vs 0.41. Short vs complex split informed by the AR-DRG distribution for these admissions (Tran et al. 2025).	\$2,500	Cost to government, short-stay / lower-complexity admission. Between Tran et al. (2025) non-overnight general-hospital cost (\$680) and overnight (\$8,594); below the NHCDC acute-separation average (\$5,315; IHACPA 2023).	The model uses midpoint values of 15% and 1.35, giving $0.15 \times 1.35 = 0.20$ events per person per year.
Long/complex hospital admission	0.05	Higher-complexity subset of the 0.41/PY admission envelope (McKetin et al. 2018). Tran et al. (2025) Table S7 shows major-complexity AR-DRGs among these admissions costing \$14,000–\$62,736.	\$7,500	Cost to government, long/complex acute admission. Conservative against Tran et al. (2025) overnight general-hospital cost (\$8,594) and the major-complexity AR-DRG tail; above the NHCDC acute average (\$5,315; IHACPA 2023).	The model uses midpoint values of 15% (any admission), 25% (long/complex share), and 1.3 admissions, giving $0.15 \times 0.25 \times 1.3 = 0.05$ events per person per year.
Intensive care admission	0.01	Highest-acuity subset of the admission envelope (McKetin et al. 2018). ICU $\approx 7.5\%$ of admissions — conservative. 16.8% of	\$20,000	Cost to government, full acute episode involving intensive care. ICU bed-day \$4,375 (Hicks et al. 2019); median overdose ICU stay ≈ 2 days (Athavale et al., 2017; 42 hours in	The model uses midpoint values of 15% (any admission), 7.5% (ICU share), and 1.2 stays, giving $0.15 \times 0.075 \times 1.2$

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
		methamphetamine-positive hospital encounters involved ICU (Suto et al., 2024) and ~20% of drug-overdose admissions require ICU (Athavale et al. 2017). Those apply to higher-acuity subsets, so 7.5% across all admissions is conservative.		Suto et al., 2024) ≈ \$8,750 for the ICU component, with \$20,000 covering the full episode including surrounding ward care (assumption). Note: exceeds the ICU-only admission range of \$4,888–\$14,606 (Carrandi et al. 2024) because it captures the whole episode.	= 0.014 events per person per year (rounded to 0.01).

Table 22. Model inputs: Government - crime and justice system

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
Police incident	0.47	20-40% of people using methamphetamine or heavy alcohol have ≥1 police incident annually (24% of the national IDRS sample reported past-year arrest in both 2023 and 2024, with 25-43% across state samples in 2019-	\$1,300	Cost per police incident is an assumption informed by RoGS policing expenditure (Productivity Commission, 2023), which reports expenditure per person in the population (\$575 in 2021–22) rather than a per-incident cost.	The model uses midpoint values of 30% and 1.55, giving $0.30 \times 1.55 = 0.47$ events per person per year.

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
		20 and a further ~30% reporting non-arrest police contact: Sutherland et al., 2023; NDARC, 2024; cf. 42% of police detainees with a prior charge in the previous 12 months: AIC, 2020). The 1.3-1.8 incident multiplicity among those with ≥ 1 is an assumption, not reported in these sources.			
Court matter	0.14	20-40% of high-risk methamphetamine or heavy alcohol users have ≥ 1 police incident annually, and 30-50% of these incidents result in a court matter — assumption; published anchors are mismatched measures: 60-86% of police proceedings are court actions (ABS, 2025a), while NSW 90-day legal-action rates for property offences are 13-26% (Donnelly, 2025). Among those with ≥ 1 court matter, the average number of matters is 1.1-1.3 per year.	\$4,200	Court processing cost per finalised matter — assumption sitting between the RoGS net costs per criminal finalisation of \$978 (magistrates' courts) and \$16,331–\$25,292 (higher courts) (Productivity Commission, 2023).	The model uses midpoint values of 30% (police contact), 40% (court conversion), and 1.2 matters, giving $0.30 \times 0.40 \times 1.2 = 0.14$ events per person per year.

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
Custody days	0.07	20-40% of high-risk methamphetamine or heavy alcohol users have ≥ 1 police incident annually, and 10-20% of these incidents result in a short custody episode — assumption; no published rate exists for short custody episodes per police incident (nationally, 11% of guilty court defendants receive a custodial sentence — a different, narrower measure: ABS, 2025b). Among those with ≥ 1 custody episode, the average number of episodes is 1.3-1.7 per year.	\$400/day	Per-prisoner-day cost from RoGS corrections expenditure (Productivity Commission, 2023; \$405.18 per prisoner per day including capital costs, 2021–22).	The model uses midpoint values of 30% (police contact), 15% (custody conversion), and 1.5 episodes, giving $0.30 \times 0.15 \times 1.5 = 0.07$ custody episodes per person per year.

Table 23. Model inputs: Government - housing instability and homelessness

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
SHS support period	0.15	15-25% of high-risk AOD users experience homelessness or housing instability annually (Topp et al., 2013; Johnson & Chamberlain, 2008), and 40-60% of people experiencing homelessness access SHS in a given year (AIHW, 2023c). Among those with ≥ 1 SHS support period, the average number of periods is 1.3-1.6 per year.	\$1,500	Conservative assumption: set well below the reported \$4,306 cost per completed SHS support period in 2024–25 (Productivity Commission, 2026b).	The model uses midpoint values of 20% (homelessness), 50% (SHS access), and 1.45 periods, giving $0.20 \times 0.50 \times 1.45 = 0.15$ events per person per year.
Crisis accommodation nights	0.30	15-25% of high-risk AOD users experience homelessness or housing instability annually (Topp et al., 2013; Johnson & Chamberlain, 2008), and 20-40% of people experiencing homelessness use crisis accommodation in a given year (AIHW, 2023c). Among those who use crisis accommodation, the	\$150/night	Crisis accommodation cost from SHS expenditure (AIHW, 2023c).	The model uses midpoint values of 20% (homelessness), 30% (crisis accommodation use), and 5 nights, giving $0.20 \times 0.30 \times 5 = 0.30$ nights per person per year.

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
		average number of nights is 3-7 per year.			
Tenancy failure	0.04	70-80% of high-risk AOD users live in private or social housing (Topp et al., 2013; ABS, 2022), and 3-7% of housed high-risk AOD users experience tenancy failure annually (Johnson & Chamberlain, 2008; Vallesi et al., 2018).	\$7,500	Cost of failed tenancy (repairs, vacancy, re-letting) — conservative assumption, below the \$10,441 average cost per public housing eviction in WA (Zaretsky et al., 2013, as cited in Vallesi et al., 2018).	The model uses midpoint values of 75% (housed) and 5% (tenancy failure), giving $0.75 \times 0.05 = 0.04$ tenancy failures per person per year.

Table 24. Model inputs: Government - earnings and productivity

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
Avoided JobSeeker payments	0.14	20-40% of people with severe methamphetamine or alcohol use experience job loss or unstable employment annually (Roche et al., 2016; Lanyon et al., 2019). Income-support data show that 40-60% of high-risk AOD users	\$20,537/year	Annual JobSeeker Payment rate (Services Australia, 2025). Single, no-children rate of \$789.90 per fortnight (from 20 March 2025, including Energy Supplement) $\times 26$.	The model uses midpoint values of 25% (job loss) and 55% (JobSeeker receipt), giving $0.25 \times 0.55 = 0.14$ JobSeeker

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
		receive JobSeeker or equivalent unemployment benefits, with the remainder primarily on DSP or Parenting Payment (assumption; cf. AIHW, 2023c).			recipients per person per year. Assumes full-rate JobSeeker for those not working.
Increased income tax revenue	0.15	20-40% of high-risk AOD users are employed at any given time, and 40-60% of those earn below the tax-free threshold, with 10-20% reporting near-zero taxable income (Lanyon et al., 2019).	\$4,288/year	Average tax payable on \$45,000 income (ATO, 2025). Computed on 2024–25 resident rates, excluding Medicare levy and offsets.	The model uses a midpoint of 15% of participants who would otherwise have near-zero taxable income in the absence of the program, giving 0.15 cases per person per year. The model assumes that participants who return to stable employment earn \$45,000 per year, which reflects a conservative estimate of entry-level full-time wages in Australia. Award-based roles commonly accessed by people exiting high-risk

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
					AOD use-such as hospitality, retail, warehousing, cleaning, disability support, and labouring-typically fall within the \$44,000-\$52,000 range.

Table 25. Model inputs: Government - mortality and morbidity

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
Premature death	0.0002	Pooled all-cause mortality among people with regular or dependent amphetamine use is 1.11 per 100 person-years — approximately 111 per 10,000 (Stockings et al., 2019); heavy alcohol use carries similarly elevated mortality risk (Rehm et al., 2017). The modelled 2 per 10,000 is a highly	\$4,900,000	Australian Value of a Statistical Life (Office of Impact Analysis, 2023). The \$4.9m used is deliberately conservative: the OIA (2023) central value is \$5.4m in 2023 dollars.	The model uses a conservative point estimate of 2 per 10,000, giving 0.0002 deaths per person per year.

Outcome type	Events per person per year	Evidence summary (incidence)	Unit cost (2025 \$)	Evidence summary (unit cost)	Notes
		conservative fraction of observed rates.			
Serious morbidity	0.135	5-15% of people with severe AOD use experience ≥1 serious non-fatal health event annually, with 1.1-1.4 events among those with ≥1 (McKetin et al., 2018).	\$100,000	Value of a Statistical Life Year (VSLY) valuation: 0.3 disability weight x 1.5 years of impact x \$220k VSLY (OIA, 2023). The \$220k VSLY sits conservatively below the OIA (2023) value of \$235,000 (2023 dollars).	The model uses midpoint values of 10% and 1.35, giving $0.10 \times 1.35 = 0.135$ events per person per year. Represents major non-fatal health events (e.g., overdose survival, acute organ failure episodes).

Participants

Table 26. Model inputs: Participants - improved wellbeing

Outcome type	Events per person per year	Evidence summary (incidence)	Unit value (2025 \$)	Evidence summary (unit value)	Notes
--------------	----------------------------	------------------------------	----------------------	-------------------------------	-------

Wellbeing gain (partial relief from depression/anxiety)	0.78	Program data show 78% of participants have an improved K10 score at completion; 89% have improved K5.	\$8,000 per person per year	Based on the ASVB (Alliance Social Enterprises, n.d.) wellbeing valuation for <i>relief from depression/anxiety</i> (approx. \$20,000 per year for full relief), scaled to 40% to reflect partial relief.	No overlap with fiscal benefits (e.g., health or welfare savings).
--	------	---	-----------------------------	---	--

Table 27. Model inputs: Participants - increased participant income

Outcome type	Events per person per year	Evidence summary (incidence)	Unit value (2025 \$)	Evidence summary (unit value)	Notes
Increased participant income (net earnings)	0.15	Longitudinal AOD studies show 20-40% of high-risk AOD users are employed at any time, with 10-20% having near-zero taxable income (Lanyon et al., 2019). The model assumes 15% of participants move from near-zero taxable income to stable employment.	\$40,712/year	\$45,000 gross earnings - \$4,288 tax (ATO, 2025). \$45k reflects conservative entry-level full-time wages in sectors commonly accessed post-recovery.	Uses net earnings to avoid double-counting with government tax revenue. Incidence aligned with government tax line.

Table 28. Model inputs: Participants - reduced personal spending on substances

Outcome type	Events per person per year	Evidence summary (incidence)	Unit value (2025 \$)	Evidence summary (unit value)	Notes

Reduced personal spending on substances	0.55	Evaluation data from other Catalyst programs (2020; see Table 8) show that 55% of participants have reduction or cessation in primary substance use at completion.	\$3,120/year	Dependent users spent a mean of \$161.47/week on methamphetamine in 2013–14 dollars (Whetton et al., 2016). The model adopts a conservative \$60/week, giving ~\$3,120/year.
--	------	--	--------------	--

Employers and workplaces

Table 29. Model inputs: Employers and workplaces - avoided absenteeism

Outcome type	Events per person per year	Evidence summary (incidence)	Unit value (2025 \$)	Evidence summary (unit value)	Notes
Avoided absenteeism days	1.5	Lanyon et al. (2019) report 20-40% of high-risk AOD users are employed. Assume 30% of participants are employed. Treatment is assumed to reduce AOD-related absenteeism by several days per year; we assume a 5-day reduction per employed participant, giving $0.30 \times 5 = 1.5$ days per participant per year (assumption; Roche et al., 2016, quantify the national AOD absenteeism burden).	\$350/day	Approximate cost of a lost workday (wage + on-costs + productivity loss) for \$45k salary. Consistent with \$267.70/day (2013 wages plus 20% on-costs; Roche et al., 2016) indexed to 2025 wages (assumption).	

Table 30. Model inputs: Employers and workplaces - avoided job replacement (turnover) costs

Outcome type	Events per person per year	Evidence summary (incidence)	Unit value (2025 \$)	Evidence summary (unit value)	Notes
Avoided job replacement	0.03	AOD instability increases job loss risk; 5-15% of employed high-risk users lose jobs annually (assumption; cf. Roche et al., 2016). Assume 30% of participants are employed and 10% of those would otherwise lose their job due to AOD, giving $0.30 \times 0.10 = 0.03$ job losses per participant per year.	\$11,000	Recruitment + onboarding costs often estimated at 20-30% of salary (Boushey & Glynn, 2012). For \$45k salary, ~\$9k-\$13.5k.	